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ABSTRACT

The supplement to the Career Orientation Curriculum Guide: 7-8 provides actual units of instruction which have been utilized in career orientation programs throughout the State of Ohio. In general, the units contain teacher and student objectives, student activities, teaching procedures, information on career opportunities in specific fields, and resource lists. These items, for some of the units, are presented in chart form. Some of the units contain instructional material for use with the activities. The units are organized around the following subject areas: art, guidance, health, home economics, industrial arts, integrated units (concerned with the seven basic developmental areas of self, the individual and the environment, economics, world of work, education and training, employability and work adjustment skills, and vocational decision making), language arts, math, music, science, social studies, and typing. (Author/MS)

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FOREWORD

The new urbanized technological society has brought the urgency for an abrupt turnaround in thinking about the place of the school in our world.

Our economy's rapidly changing character with large industry remote from residential areas, surrounded by fences, and protected by security guards does not permit youngsters to see their parents or others at work.

Many children's parents are recipients of public assistance checks, a situation which compounds the problem of teaching job-centered values.

A Career Orientation Program Guide has been available as have curriculum guides in the K-6 Career Motivation Program and the 9-10 Career Exploration Program. We hope that the Career Orientation Curriculum Supplement will provide further direction and help for teachers in individualizing the curriculum.

Martin W Essex

Martin W. Essex
Superintendent of Public Instruction

INTRODUCTION

The Career Orientation Program at Grades 7 and 8 was the initial component of the K-10 Career Development Program and began in Ohio in 1970. In 1972, a Career Orientation Curriculum Guide was written and published through the inputs of personnel in the participating school districts. The Guide was revised in 1973, again utilizing local personnel.

The Curriculum Guide provided sample objectives and activities to aid school district personnel in the curriculum development process. This Supplement provides actual units which have been utilized in Career Orientation Programs throughout the State of Ohio.

Materials for this publication were screened by James Black, Parma; Margaret Dietlin, South-Western; and Eugene Woolery, Dayton. State staff assistance was provided by Linda A. Keilholtz.

Byrl R. Shoemaker

Byrl R. Shoemaker
Director of Vocational Education

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CARRER ORIENTATION CURRICULUM SUPPLEMENT

The purpose of this publication is to present a variety of programs that exemplify career orientation in action. This task was pursued to provide school districts now in the Career Development Program with materials to enhance their existing programs. Also, this document is intended to provide school systems wishing to plan Career Orientation Programs with some concrete examples of working programs.

Because school systems, like students, are individualistic in nature, it is not recommended that any system adopt the following units "in toto." The materials will, however, provide a basis for individual development and do incorporate the concepts of the Career Orientation Program.

PARMA

Art

This unit clearly defines the job clusters as well as art activities that integrate the careers.

PARMA

Career Orientation in Art

Grades 7 and 8

Cluster Identification List

I. Field of Study: Commericial Illustration

Communications and Media
Marketing and Distribution
Public Service
Fine Arts and Humanities

Activity: The student will illustrate a story or poem for magazine or book reproduction

II. Field of Study: Commercial Design

Marketing and Distribution
Communications and Media
Public Service
Fine Arts and Humanities

Activity: The student will design a greeting card suitable for reproduction and retail trade.

III. Field of Study: Commercial Poster Design

Communications and Media
Marketing and Distribution
Public Service
Environment

Activity: The student will design a car card or a spot advertisement reflecting contemporary themes, such as travel, pollution, drugs, or sports.

IV. Field of Study: Cartooning

Communications and Media
Fine Arts and Humanities
Public Service
Hospitality and Recreation

Activity: Create original cartoons suitable for newspaper or magazine reproduction, reflecting contemporary situations, political or humorous.

V. Field of Study: Commercial Textile Printing

Consumer and Homemaking Related Occupations
Fine Arts and Humanities
Manufacturing

Activity: To create a design for use on a fabric, utilizing a printing method related to commercial reproduction.

VI. Field of Study: Commercial Advertising

Communications and Media
Manufacturing
Marketing and Distribution

Activity: The student will design a trademark (logo) for a specific product, company, club, or organization.

VII. Field of Study: Stage Set Design and Related Areas

Fine Arts and Humanities
Consumer and Homemaking Related Occupations
Construction

Activity: The student will design and construct a model stage set, diorama, or private home.

VIII. Field of Study: Commercial Pottery and Sculpture

Fine Arts and Humanities
Manufacturing
Consumer and Homemaking Related Occupations

Activity: The student will design a bas-relief to be used on interior wall or exterior facade.

IX. Sample lesson plans supplement units where special procedures are necessary

Silk Screen
Stencil Printing
Linoleum Block Printing
Tie and Dye
Batik

X. Art and Art Related Careers List

Career Orientation in Art

I. Field of Study--Commercial Design

General Goals:

1. To make the student aware of the scope of commercial art illustration and the depth of training necessary to function in this field.
2. To make the student aware of the importance of visual communication in relationship to many aspects of daily living.
3. To help the student become more skillful in lettering, layout, and illustration.

Objective:

1. Given the fundamentals of drawing, illustration, and pictorial design relative to specific commercial areas, the student will draw an original composition suitable for commercial reproduction.

Suggested Activities:

The following projects should emphasize illustration and color limitations relative to publishing requirements:

(1) Design an album cover
(2) Illustrate a poem or short story
(3) Illustrate an athletic event for a sports magazine
(4) Design a book cover
(5) Design an illustrative travel poster

Procedures:

1. Films
    - Poster Making - Silk Screen
    - The Lively Art of Picture Books
    - Basic Reproduction Processes in the Graphic Arts
2. Filmstrips/records
    - Graphic Design: Layout
    - Tools of the Graphic Designer
    - Careers in Illustration
    - Careers in Fashion
3. Field trip to publishing company
4. Teacher demonstration
5. Examples of current work
6. Handbook--Job Descriptions
7. Pamphlets
    - Occupational Briefs:
    - "Commercial Artist, Illustration"
    - "Fashion Illustrator"

Preparation:

1. A thorough understanding of color theory including background in color mixing, value and intensity.
2. Experiences in painting techniques.
3. An exposure to a wide range of lettering techniques and styles.
4. A knowledge of figure drawing and portraiture.
5. Training and experience with scratchboard technique.

Materials: Select according to the technique listed below--

1. Scratchboard
2. Ink wash or pen and ink
3. Watercolor
4. Tempera paint
5. Silkscreen

Evaluation:

1. Self-evaluation as well as group evaluation should be a continual process through-out the project.
2. Student art should be displayed in a school showcase.

References:

Books--
Art for Today's Schools, George F. Horn.
Davis Publications, Inc., 1967.
Crafts Designs, Mosely Johnson, Koenig.
Wadsworth Publishing Co., Inc., 1962.
Elements of Design, Donald M. Anderson.
Holt, Rinehart, Winston, Inc., 1961

II. Field of Study--Commercial Poster Design

General Goals:

1. To gain an awareness of the powerful influence exerted by the commercial designer on the home and community.
2. To understand the possibilities and the limitations of various tools, media, and processes used by others for the solution of problems in visual communication.

Objective:

1. After having been provided with the opportunity to explore color, lettering, and layout techniques, the student will be able to express unusual design relationships through interpretation and development of skills in illustration.

Suggested Activities:

1. Design a greeting card with emphasis on design principles utilized by commercial artists.
2. Design note paper with floral design or butterflies.
3. Design a logo representing one of the following--

    Club
    School
    Airline
    Public Service
    Centennial Theme

4. Design a cover for a textbook.
5. Design a plaque in clay or plaster suitable for reproduction.

Procedures:

1. Film
    How a Commercial Artist Works
2. Filmstrips
    Graphic Design: Layout and
    Tools of the Graphic Designer (Bailey Films)
3. Field trips to commercial art studio
4. Teacher demonstration
5. Examples of current work
6. Books--
    Discovering Design, Downer
    Design Graphic, Martin
    Basic Design, Principles and Practice, Bates
7. Handbooks--Job Description
8. Pamphlets--Occupational Briefs "Commercial Artist"

Preparation:

1. Knowledge of color theory and value
2. Experience in painting techniques
3. Understanding stylization
4. Exposure to three-dimensional design

Materials:

1. Tempera paint
2. Pens (drawing and lettering)
3. Watercolor
4. Plaster and clay
5. Manila or white tagboard

Evaluation:

1. Self-evaluation during and after project with critique by teacher.
2. Student work will be evaluated by the students.

References:

1. Books
   Art For Today's Schools, George F. Horn. Davis Publications, Inc., 1967

2. Correspondence
   National Society of Art Directors
   Society of Designers and Illustrators
   The Magazine Publishers Association, Inc.
   Addressograph-Multigraph Company
   American Association of Advertising Agencies
   NAEA

III. Field of Study--Commercial Poster Design

General Goals:

1. To develop an understanding of the processes and techniques characteristic to commercial art.

2. To gain an awareness of the influence of the commercial artist or designer on the home and community.

Objectives:

1. After being presented with advertising design principles and techniques involving lettering, illustration, and advertising color theory for emotional appeal, the student will express an original idea from its beginning stages through layout and workup to final color design for reproduction.

Suggested Activities:

1. Design a poster or car card for the contemporary topics listed below--

   Food products
   Visit the zoo
   Support the hospital
   Support the orchestra
   Pollution problems
   Travel
   Drugs
   Keep school clean or keep the community clean

Procedures:

1. Sample from high school art class

2. Books
   Poster Designing, Making and Reproducing, George F. Horn.

3. Movies
   Poster Making Design and Technique
   Poster Making with Silk Screen
   How a Commercial Artist Works

4. Examples of different types of lettering found in magazines by the students.

5. Examples--
   Representative fine productions of advertising art taken from magazines, newspapers, and brochures.

6. Teacher Demonstration--
   Emphasize lettering, layout, principles, or color and design
   Stress the importance of the number of colors to be used and the size of the design
   Discuss the procedure of thumbnail sketches, color sketches, and transfer of design to the final board of paper.

7. Notebook Insert--Job Description

8. Pamphlets:

   Occupational Briefs--
   "Commercial Artist and the Commercial Designer"
   "Graphic Communication," Addressograph-Multigraph Corporation
   "What Advertising Agencies Are, What They Do, and How They Do It," American Association of Advertising Agencies
   "Advertising: A Career of Action and Variety for Exceptional Men and Women," American Association of Advertising Agencies
   "Careers in Art," NAEA Publications

Preparation:

1. Color theory, color schemes, and mixing techniques

2. Lettering
   Cut paper
   Standard Gothic using speedball pen points
   Creative and Expressive

Materials:

1. Paper--Newsprint for thumbnail sketches
   Tissue or tracing for transferring of design or lettering
   Heavy white paper or illustration board for the final

2. Equipment--Tempera paint, brushes, India ink, felt pens, rulers, and scissors

3. Silkscreen equipment if teacher decides the project warrants it.

Advertising Art:

Evaluation--

1. It is imperative that the student either participate in a group evaluation or student-teacher evaluation during the design process. Careful planning and frequent evaluation will strengthen the student's work as well as his confidence.

2. The student's work shodld be displayed in the school showcase.

IV. Field of Study--Cartooning

General Goals:

1. To encourage awareness of the uses for cartooning in advertising art such as public relations, political satire, entertainment, information, and educational purposes.

2. To gain an awareness of the specialized art training necessary for the production of cartoons in all forms.

Objectives:

1. Given instruction in cartooning techniques such use of line, contrast, and exaggeration of facial features and body gestures for emotional impact, the student will create a humorous cartoon of a fellow student.

2. After being presented with various directions in cartooning such as public service or political satire, the student will create an original cartoon suitable for reproduction.

Suggested Activities:

1. Draw a figure in a humorous situation.

2. Create an original cartoon reflecting contemporary situations such as drugs, pollution, smoking, parental communication, and political or sports activities.

3. Create a sequential cartoon strip with appropriate phrasiology.

4. Draw an animated cartoon in flip book form.

Procedures:

1. Film
   Creating Cartoons Behind the Scenes at Walt Disney

2. Filmstrips
   Hank Ketchem (cartoon)

3. Books
   Cartooning
   Copies of Figures and Faces
   Cartooning the Head and Figure

4. Teacher demonstration on cartooning techniques

Preparation:

1. Pen and ink techniques
2. Understanding line, value, and figure proportion
3. Cartooning with stylization exercises

Materials:

1. Newsprint, Manila and antique board
2. Tracing paper
3. India ink and various pen points and wash brushes

Evaluation:

1. Continual evaluation by teacher and student in the initial stages and the progression toward the final cartoon.

2. Evaluation of the finished product by the teacher and student.

V. Field of Study--Commercial Art (Textile Printing)

General Goals:

1. To gain an awareness of good design relative to textile printing which will fulfill consumer needs and raise the level of public taste.

2. To acquaint the student with the variety of careers in the field of textile design and printing.

Objectives:

1. After receiving full information about textile design and printing techniques, the student will be able to create an original design applicable to a fabric for a specific decorative purpose.

2. After having had experience with printmaking processes, the student will be aware of the many ways in which one can execute a repeat pattern.

Suggested Activities:

1. Create a design for use on fabric utilizing one of the methods listed below:

   Batik
   Silk Screen
   Linoleum Block
   Tie-Dye

Procedures:

1. Films
   Silk Screen Textile Printing
   How to Make a Linoleum Block Print
   How to Make a Stencil Print
   Batik
   Costume Design

2. Filmstrips
   Careers in Fashion - record
   Batik I and II
   Block Printing on Textile I and II
   Silk Screening Textiles I and II
   Painting Textiles
   Tie-Dye Textiles

3. Field trip to wallpaper company

4. Teacher demonstration

5. Examples of current work borrowed from local department and fabric stores.

6. Handbook--Job Description

7. Pamphlets--Occupational Briefs:

   a. "Careers in Commercial Art - Free Lance Artist Illustrator"

   b. "Designers - Cloth Designers"

Preparation:

1. A strong background in color theory including knowledge of color mixing, value and intensity.

2. An exposure to the technique of free brush.

3. Experience in simple printing procedures using linoleum or eraser prints.

4. An understanding of good design including the skill in using the design elements and principles.

5. Special lesson involving principles of repeating motifs.

Materials:

a. Refer to individual units on class methods for junior high.

Evaluation:

1. It is imperative that the student either participate in a group evaluation or student-teacher evaluation during the design process. The techniques to be used in the printing will greatly affect the design. Careful planning and frequent evaluation will strengthen the student's work as well as his confidence.

References:

1. Books
   Crafts Design, Mosley, Johnson, Koenig. Wadsworth Publishing Co., 1962

2. Correspondence:
   American Textile Manufacturers Institute, Inc.
   Trait Tex Industry
   Society of Designers and Illustrators

VI. Field of Study--Commercial Art (Advertising)

General Goals:

1. To gain an awareness and understanding of the emotional impact of the advertisement on the public with emphasis on the artist who is responsible for its creation and production.

Objectives:

1. After being presented with design and construction methods, the student will draw a flat or three-dimensional design for a product or item for the retail trade.

Suggested Activities:

1. Design or re-design a container or package for an item with which the student is familiar, i.e., cereal, soap, perfume, powder, cookies, shaving lotion.
2. Draw a layout for an advertising campaign, using the design of the student's choice.
3. Design a logo for a specific company, club, or organization.

Procedures:

1. Films
   - Boxed to Sell
   - Design into Space
   - Of the People, For the People
   - How a Commercial Artist Works
2. Speaker--Representative for a display company or artist from a commercial art studio
3. Teacher demonstration
4. Examples of current advertisements and work from students in the area.
5. Notebook insert--Occupational Briefs:
   a. "Industrial Designer"
   b. "Designer"
   c. "Commercial Artist"

Preparation: Special Training in Art Technique

1. Color theory is needed to enable the student to mix the color he desires.
2. Lettering is required as an integral part of the advertising.
3. Painting experience is desirable to permit the student to better express his ideas.

Materials: The usual equipment found in the art department

1. Tempera paint, brushes, rulers, pencils, tracing paper, and ink
2. Illustration board, discarded cardboard, and usable discarded boxes

Student Evaluation:

1. The student evaluates the products, displays and ads.
2. A discussion of the variety of jobs in the three-fold project.
3. A display in the school showcase for evaluation by students who are not members of the art class.

References:

1. Books

   Job Family Series: Job in Art
   Dictionary of Occupational Titles
   Encyclopedia and Vocational Guidance of Careers
   Guide to Careers and Professions (Cowles)
   Occupational Outlook Handbook

2. Correspondence
   Addressograph-Multigraph Company
   Designers Society of America
   Industrial Designer's Institute
   Packaging Institute
   American Association of Advertising Agencies

VII. Field of Study--Stage Set Design and Related Areas

General Goals:

1. To expose the student to the wide range of careers in three-dimensional design and construction, relative to his home, community, and cultural environment.
2. To encourage involvement in a group situation stressing cooperation, responsibility, and experience.

Objectives:

1. Given the principles of three-dimensional construction and the necessary research for a specific function, the student will design a scale model stage set, diorama, or home.
2. After being exposed to the principles of prespective and the fundamentals of color theory, texture, and lighting, the student will apply this knowledge in the creation of depth and mood.

Suggested Activities:

To design and complete the construction of a miniature stage set, a diorama, or or model of a home.

Procedures:

1. Films
   Art Director
   How to Make and Use Diorama
   How to Make a House Model
   Creative World of Interior Design
   Designing a Better Tommorrow: Career in Architecture

2. Field Trips
   Ohio Display Co.
   Art Museum of History Museum - Diorama
   Local television studio
   Exposure to live plays - local theater or school production
   Architect's studio

3. A classroom demonstration by the teacher should be limited to individual student problems. Presentation of these different projects can easily be handled through the aid of films, filmstrips, and speakers. Field trips should be scheduled only if they are beneficial to the entire group of students and should be preplanned with extreme care.

4. Handbook--Job Description

5. Pamphlets--Occupational Briefs
   a. "Industrial Designer"
   b. "Interior Decorator"
   c. "Careers in Industrial Design"
   d. "Careers in Commercial Art"
   e. "Art Gallery Operation as a Career"

Preparation: Special Training in Art Techniques

1. A background in color theory and painting technique

2. Perspective--either one-point or two-point

3. Exposure to scale and an ability to use both ruler and triangle.

Materials:

1. Stage set and house model

   Cardboard boxes or illustration board
   X-ACTO Knives
   Balsam wood or styrofoam
   Watercolor or tempera paint
   Brushes
   Cloth scraps, pieces of sponge, twigs, collection of odds and ends

Student Evaluation:

1. Group work should be continually evaluated by the individuals within the group.

2. Finished work should be displayed in school showcase.

References:

1. Books

   Designing for TV, 1952
   Stages of the World, Theatre Arts Prints, Springfield, Illinois, 1949.
   The House and the Art of its Design, Kennedy. Reinhold, New York, 1953.

2. Correspondence
   National Society of Art Directors
   Should You be An Architect? (New York Life Insurance Company)

VIII. Field of Study--Commercial Pottery and Sculpture

General Goals:

1. Make the student aware of the many career opportunities in the field of pottery and ceramic sculpture.

2. Expose the student to the many uses of ceramics in his daily living, from large architectural murals and facades to small utilitarian objects.

3. Enable the students to realize the significance of the pottery industry relative to the production of objects both decorative and functional.

Objectives:

1. Presented with techniques in sculpture and pottery-making, the student will construct a decorative or functional ceramic object or sculpture.

Suggested Activities:

The student will be exposed to the procedures for working with ceramic clay. Special attention will be given to design, modeling, texture, and decoration relative to the article of the student's choice.

1. Sculpture

   a. An animal figure or free form suitable for use in a home or garden setting.

   b. Design a bas-relief to be used on an interior wall or exterior facade.

   c. Design and sculpt a plaque or emblem that could be reproduced in plaster.

2. Pottery

   a. Ceramic pot, coil, or slab method, with attention given to decorative elements.

   b. Design a pot or vase that is utilitarian.

Procedures:

1. Films on pottery, sculpture, and ceramics in general.

2. Lecture and demonstration by teacher on techniques and decorative elements.

3. Slides and photographs reflecting sculpture forms of stylized and utilitarian objects.

4. Visit a pottery manufacturer.

5. Have a ceramic consultant speak on the ceramic industry.

Materials:

1. Ceramic clay--white talc clay or terra cotta suitable for building and modeling techniques.

2. Modeling tools, wood rollers, and blocks for flat work.

3. Ceramic glazes for decoration and color as applied to clay.

Evaluation:

1. The student will do continual self-evaluation during the progress of the lesson.

2. The teacher will evaluate during and after the project and will have an individual critique with the student.

3. The project will be evaluated in terms the purpose for which it was designed.

Reference:

1. Books
    Sculpture, Rogers, L.R., Oxford Univ. Pr., 1969
    Ceramic Design, Kenny, John B.
    Step by Step Ceramics, Hofsted, Jolyon
    The Complete Book of Pottery Making, Kenny, John B.

2. Career Related Books
    Fells Guide to Commercial Art, Nelson, 1967
    Opportunities in Industrial Design Careers, Pulod, 1972

The list below each Career-Oriented Project contains the titles of jobs connected with that particular phase of commercial art.

Commercial Art: Industrial Design

Director
Advertising Layout Man
Layout Artist
Letterer
Production Manager
Manager of Display
Information Specialist
Package Designer
Display Man
Sign Painter
Design Draftsman
Airbrush Man
Sign Writer
Colorist
Engrosser
Display Man (trimmer)
Paste-up Man

Commercial Art: Repeat Design (Textile)

Color Expert
Colorist
Letterer
Artist
Print Maker
Stencil Cutter
Cartoon Designer
Sample Maker
Engraver
Manager of Display
Display Man (retail)

Designers

Interior
Decorator
Cloth
Commercial
Floral
Pottery Decorator
Women's Garments
Safety Clothing
Mural
Float
Fur
Handbag
Hats (Men & Women)
Jewelry
Shoe
Bank Note
Crest Pattern-maker
Fishing Lures
Novelities
Fixtures
Embroidery
Furniture
Flatware
Ornamental
Stained-glass
Stuffed Toy
Tile

Commercial Pottery And Sculpture

Commercial Designer
Sculptor
Auto and Body Parts Designer
Industrial Designer
Artist

Stage Set Design

Miniature Set Constructor
Set Decorator
Stage-set Designer
Model Maker
Sketcher
Stage-Scenery Director
Scenic Artist

Commercial Art: Illustration

Art Layout Man
Cover Designer
Illustrator
Layout
Letterer
Medical Illustrator
Ben-Day Man
Production Manager
Manager of Display
Sign Painter
Airbrush Painter
Photo Re-toucher
Colorist
Engrosser
Paste-up Man
Sketchmaker
Artist

Cartooning

Cartoonist
Cartoon Background Artist
Color Advisor
Colorman
Sketcher
Supervisor--Scenic Arts
Inker and Opaquer
Painter--Animated Cartoons
Sports Cartoonist
Political Cartoonist

Others: Professional And Related

Fine Arts Painter
Painter-Restorer
Painter--Glass Stainer
Teachers of Art
Director of Art
Museum Curator
Furniture Reproducer
Wood-burner (Jewelry)
Appraiser of Art
Architect
Delineator
Draftsman
Art Critic
Printmaker
Art Librarian
Landscape Architect

Note: Descriptions of these will be discussed in class and also be included in sheets to be placed in the notebook for reference.

PARMA

Guidance

This is an excellent "spelling out" of how one school district perceives guidance services being incorporated into the career orientation program.

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Goals and Objectives of the Guidance Department for Career Education

The Guidance Department for the Parma Public Schools will be able to assist the student in understanding himself better by--

1. Aiding the student in seeing himself as a total person
2. Working with staff in making career information available to students and faculty
3. Assisting in providing general orientation to the career program for staff, students and community
4. Providing general orientation to the world of work
5. Guiding the student in individual curricular choices
6. Providing in-service training for staff on career resources
7. Administering and/or supervising the administration of questionnaires, inventories, and ability, aptitude, and achievement tests
8. Interpreting results of tests to students, faculty, and parents either on an individual or group basis
9. Providing information on existing extra-curricular activities and assisting in the establishment of new activities
10. Supplementing and assisting departments as resource people
11. Communicating with administration and coordinators with suggestions for curriculum development, revision, and evaluation
12. Continuing to inform the community of the on-going career program

Orientation to Career Program

Staff

1. General introduction of career program by the principal and designated persons

   Philosophy of program
   Goals
   Role of each department
   Role of Guidance Department

2. New staff hired throughout the year to be given the above overview and orientation background

3. Meet with all department chairmen early in the fall.

   a. Each chairman is to outline his department's career program.

   b. Counselors and chairmen will resolve conflicts.

4. Have faculty meeting following counselor and department chairmen's meeting.

   a. Present over-all career program.

5. Continue to correlate activities with department chairmen throughout the year.

Students

1. General introduction of school's career program by principal and designated persons (early in year).

2. Grade levels

   a. Seventh Grade

      (1) Small group meeting during the school year

         (a) Lay foundation for school's career program
         (b) Introduce self-evaluation techniques
         (c) Expose to clusters of career opportunities
         (d) Work with all departments where necessary in special career orientation presentations
         (e) Orientation to Parma's vocational offerings
         (f) Assist with aiding students to apply for social security cards
         (g) Inform students of school's extra-curricular and volunteer activities

      (2) Individual follow-up conferences when necessary for curricular selections

   b. Eigth Grade

      (1) Small group meetings

         (a) Review career clusters discussed in seventh grade.
         (b) Enlarge on career offerings presented in seventh grade.
         (c) Review self-evaluation techniques.
         (d) Assist students in the techniques of evaluating a specific career.

(e) Explain Parma's vocational offerings and requirements.
(f) Arrange for high school vocational teachers and/or vocational counselors to meet with students.
    a. To explain and discuss their programs and requirements.
(g) Assist in arranging for special career projects.
(h) Arrange visitations to colleges or technical schools, if possible.
(i) Assist in having students learn procedures for job application.
(j) Review school's extra-curricular and volunteer activities.

(2) Individual conferences for curricular selection

c. Ninth Grade

(1) "Catch-up" session to enable students new to the system to learn of the school's career program
(2) Survey to determine career interests of students
(3) Have small group meetings of students interested in specific career ideas.
(4) Review the high school vocational offerings and requirements.
(5) Arrange visitation to high school vocational classes for those interested.
(6) Arrange to have representatives from four-year campuses, two-year campuses, and special training areas.
(7) Review social security and work permit information.
(8) Assist in studying procedures for applying for a job.
(9) Inform students regarding community volunteer opportunities and part-time jobs.
(10) Individual conferences for curricular selection, when necessary

3. Orientation of the individual school community

a. Arrange a Parent's Night

(1) Present overview of career program
(2) Explanation of curricular offerings

    (a) Vocational areas
    (b) Professional
    (c) Technical
    (d) Special fields

(3) Requirements for the various programs

b. Individual parent conferences and further communications as needed

Testing

Objectives

1. To have all students become aware of their scholastic ability and how it relates to school achievement
2. To help students understand indicated strengths and weaknesses in their academic background
3. To provide students with information to guide them in educational and career planning
4. To present explanations of relationships within data, people, and things hierarchies, and workers trait components
5. To identify job clusters of high interest for further exploration of educational plans
6. To supplement test results with other sources of information, such as transcripts, teacher and counselor recommendations, and student motivation to assist in the decision-making process
7. To share information not only with the students but also with all adults concerned with their education

Orientation

1. Administration and staff

    a. Arrange meeting to explain teachers' role and responsibility in the test program.

        (1) Explanation of the three tests administered at the junior high level
        (2) Explanation of the various methods of reporting test results:
            National norms and local norms
            Percentile ranks
            Stanines
            Grade equivalent
            Standard deviation
        (3) Explanation of use of test results in educational and career planning

2. Students

    a. Present an overview of testing programs in conjunction with the initial general career orientation.

    b. Prior to the testing program, give specific orientation as to what the testing program will include.

        (1) Preparing students to take the test
        (2) Explaining use of test results in educational and career planning

Administration

1. Mental ability test

2. Interest inventories

3. **Achievement tests**

4. **Aptitude tests**

5. **Personality tests**

6. **Miscellaneous tests**

The 1972-73 Test Program

Seventh grade:	**Otis-Lennon Intelligence Test**
Eighth grade:	**Ohio Vocational Interest Survey**
Ninth grade:	**Stanford Achievement Test**

The testing program will be conducted within the framework established by the central office and building administration. Supplemental testing will be used to meet individual needs.

Interpretation

1. **Faculty**

   a. **Interpret test results to all teachers.**

      (1) **Individually**
      (2) **In groups**

2. **Students**

   a. **Distribute and interpret test results.**

      (1) **Group sessions**
      (2) **Individual conferences, when necessary**

3. **Parents**

   a. **Send home a brochure containing a complete explanation of the testing program and the results of the child's test.**

   b. **Interpretation of test results and surveys to be available on individual basis.**

Evaluation and Curriculum Implications

1. **Participate in system-wide reviews of the testing program.**

2. **Assist in analyzing the strengths and weaknesses of curriculum as evidenced by the test results.**

Knowing Yourself

Our society offers an individual many choices--choices of where to live, choices of leisure time activity, and choices of occupations, to name a few. The concept of choice requires alternatives to consider and criteria for selection. Choice, many times, implies compromise between desires of an individual and opportunities available. Keeping this in mind, being able to explore one's attitudes and values enables an individual to know himself better. Allowing a student to explore his value system and recognize different values in others is a step in setting individual goals and wise decision-making.

Objectives:

1. To help a student clarify his own values
2. To recognize different values in others
3. To recognize that values are constantly changing
4. To encourage students to continually re-evaluate their goals through their value system
5. To help students understand the process of choice and valuing
6. To help the students become more effective decision-makers
7. To encourage students to think before they act
8. To help the student gain an increased understanding of himself

This unit is divided into the following major focal points:

I. The Different You
II. The Changing You
III. The "Value"able You
IV. The Future You
V. The Successful You
VI. It Begins With You

The Different You

1. Physical features
2. Mental abilities and skills
3. Interests
4. Personality

Related Activities:

1. Refer to testing programs and interpretations of tests.
2. Class discussion--
    a. What do we really know about ourselves?
    b. What part of us is "inherited" and what part is '"acquired"?

The Changing You

1. Changing society
    - a. Increasing experience
    - b. Awareness of other group and cultural value codes
    - c. Evaluating your own code
2. Changing and growing

Related Activities:

1. Class discussion:
    - a. How have your ideas changed since coming to junior high school?
    - b. What in your peer code differs from ideas in adult society?

The "Value"able You

1. Valuing process - judging
    - a. Choosing - alternatives
    - b. Prizing - being happy with choice
    - c. Acting - doing something with the choice
2. Values
    - a. Definition of values
    - b. Sources of values
        - (1) Family
        - (2) Church
        - (3) Society
3. Importance of values
    - a. To carry on and improve society
    - b. To grow as individuals
        - (1) Know self better
        - (2) Make better personal decisions
        - (3) Re-evaluation of ideas
4. Summary of values

The following ideas should be covered through classroom activities in values:

[illegible] Definition of values

[illegible] Student exploration of his personal values

[illegible] Recognition of values in others

d. No right and wrong values

e. Values acquired through experiences

f. Importance of values to society and the individual

Related Activities for A and B:

(Note: Values, goals, and decisions are many times of a very personal nature. Students should not be made to participate verbally or share their values if they do not wish to. This allows them to be honest with themselves.)

1. List five personal values (to be kept confidential). This should be done before the general class discussion. These should be kept by the student until completion of the unit when they will be asked to list five personal values again.

2. Group discussion:

   a. Student definitions of values

   b. Each member of the group should publicly state one value. List on board. Discuss difference in values.

3. Written activities:

   a. Values and people

      (1) Qualities I like in others
      (2) Qualities I dislike in others
      (3) Qualities I like in myself
      (4) Qualities I dislike in myself
      (5) Whom do I respect most (three choices)
      (6) Whom do I respect least (three choices)

   b. Values and experiences

      (1) Happiest experiences
      (2) Saddest experience
      (3) High point of the week
      (4) Low point of the week
      (5) Things I would keep the same in school
      (6) Things I would change in school
      (7) The kind of work I really like to do
      (8) Some jobs I think I would dislike

Related Activities for C:

1. Class discussion

   a. Values in our society vs. other societies

   b. Changing values to improve society

   c. What values do others see in us?

   d. What do I need to become a good friend?

   e. What qualities do I need to hold a job?

   f. What does an employer expect of me?

2. Interview three people; ask them which three values they would place as most important to them. Discuss the results with the class.

Related Activities for D:

1. The following qualities can be used to supplement any class discussion:

   - Loyalty
   - Self-confidence
   - Courage
   - Dedication
   - Dependability
   - Foresight
   - Intelligence
   - Perseverance
   - Self-control
   - Kindness
   - Understanding
   - Sense of Humor
   - Initiative
   - Honesty
   - Integrity
   - Sincerity
   - Humility
   - Friendliness
   - Generosity
   - Conscientiousness
   - Competence
   - Concern
   - Conformity
   - Care
   - Consistency

2. The following topics can be used to supplement value judgement discussion:

   - War vs. Peace
   - The Drug Scene
   - Parental Control and Authority
   - Smoking
   - Crime
   - Race Relations
   - Environmental Conservation
   - If I Were an Employer

3. Display a series of pictures depicting qualities in people, attitudes, and values. Each student is to write a word which describes the picture to him. Follow with class discussion.

4. Complete the following sentences.

   I like ______________________________.

   I want ______________________________.

   I would fight for ______________________.

   I would be willing to spend time for ______________________________________.

   I would give money for __________________.

   I love to _____________________________.

   I feel ______________________________.

   I wish I could _________________________.

The Future You

1. Making decisions
   a. Alternatives
   b. Compromise
   c. Decision-making vs. problem solving
2. Effects of decisions
   a. To you
   b. To others
   c. Right now
   d. Later on

3. Importance of values in decision-making

4. Arriving at the same decision with different values

Related Activities:

1. Rank order--ask students to rank in order of preference several very pleasant or several very undesirable alternatives. Class discussion should follow, bringing out students' values and judgements.

   Example: Rank the following activities in importance to you:

   - a. Be the lead in the class play
   - b. Achieve good grades
   - c. Tutor another student
   - d. Be an office page

   Example: Rank the following activities in importance to you:

   - a. Hold a high paying job which is very repetitious
   - b. Hold a medium paying job which involves working with people
   - c. Hold a lower paying job which is very adventurous
   - d. Not hold a job at all

Ask students to make a decision on a continuum and ask them to support their decision.

Example: Your best friend has taken something from a store. The extremes in alternatives from which to choose would be: to do nothing or to involve the police. Each person must make a decision and place their mark on the continuum. No one may choose the exact center point. Support your decision.

DO NOTHING ◄────────────► GO TO POLICE

3. List 20 things you like or dislike to do. After this list is complete:

   - a. Mark those items with a "T" that you like to do with someone else.
   - b. Mark those items with an "A" that you would like to do alone.
   - c. Mark those five items that you would like most with a "star."
   - d. Mark ten items that you would like second most with the letter "M."
   - e. Underline things that cost money.

   What did you find out about yourself:
   1. Do I do things that I like frequently?
   2. Do I like to do things alone or with people?
   3. Are my likes expensive?

4. Happy words--state one word that had a happy meaning for you in your life during the following periods. Discuss your reasons.

   - a. Ages 1 - 5 or pre-school
   - b. Ages 6 - 12 or elementary school
   - c. Ages 13 - 15 or junior high school

The Successful You

1. Programming your life

   - a. What do I want?
   - b. What are my abilities?
   - c. Inventory interests
   - d. Explore the future

2. Forming goals

3. Daring to be different

4. Disappointments

5. Dealing with frustration
   - a. Aggression
   - b. Emotions
   - c. Re-evaluating alternatives

6. Spending leisure time

Related Activities:

1. Class discussion:
   - a. Why can some people cope with disappointment and frustration better than others?
   - b. How do you feel when you are frustrated?
   - c. How do you relieve your frustrations?

2. Written activities:
   - a. My goal for today is ______________.
   - b. My goal for the week is ______________.
   - c. My goal for this school year is ____________________.
   - d. My goal before I leave junior high school is ______________.
   - e. My goal after graduation from high school is ______________.
   - f. My goal for life is ________________.

3. Use newspaper articles to show aggression and frustration.

4. Use comics for examples of frustrating experiences.

It Begins With You

1. Can you recommend yourself?

2. Can you keep your standards high?

3. What are you investing in the future?

Related Activities:

1. List five personal values. Compare them with the values written at the beginning of the unit.

2. Class discussion:
   - a. Do personal values change in importance?
   - b. "Is it always tomorrow?" or "Get it while you can." What is your philosophy?
   - c. What do I have to invest for the future?

     Example: money, time, hope, trust, ideas, talent.

Registration

As students progress through junior high school, registration for their subjects for the following year become increasingly directed toward their career goals. Other guidance activities, such as orientation, testing, test interpretation, self-evaluation, and vocational information are important criteria for selecting courses of study which help them achieve the goals they have set for the future.

1. Guidance Responsibilities
   a. Registration of present junior high students
   b. Registration of parochial students to the public schools
   c. Registration of students new to the community
2. Guidance Procedures
   a. Faculty
      (1) Registration procedures
      (2) Registration calendar
      (3) Curricular changes
   b. Students
      (1) Registration procedures
      (2) Requirements
      (3) Electives
      (4) Subject choices related to career clusters
   c. Parent Involvement
      (1) Registration
      (2) Requirements
      (3) Relationship of courses to career orientation and exploration
3. Implementation
   a. Large group activities
      (1) Group discussion
      (2) Visits to parochial schools
      (3) Classroom visits
      (4) Parent meeting
      (5) Elementary contacts
   b. Small-group or individual activities
      (1) Seventh-, eighth-, and ninth-grade individual conferences as requested
      (2) New-entry conferences
      (3) Small groups with similiar needs or interests
      (4) Evening conferences

Sample Letter From Principal

Message from the Principal's desk:

One must see through himself--in order to see himself through.

One of the more important responsibilities that students and parents have during each school year is the selection of subjects and a course of study for the following year.

Your guidance counselor and each of your teachers will play an important role in helping you make the correct selections by providing their guidance and recommendations along with other information about you. This advice and information about yourself is to be added to what you and your parents already know about you and your future--in helping you select courses for your next year at school.

We will consider our job well done when you feel confident that your selection of subjects and your registration is complete to the satisfaction of both you and your parents.

The real test of a mature and independent person is when he knows enough about himself to plan his life in a way that his talents and interests will be used to bring about opportunities for self-fulfillment and happiness.

We trust that you will start toward this goal by giving this new experience in registration your serious consideration--and please feel free to ask guidance and assistance from all of us at school.

A Sample Letter From Principal - Early in School Year

To parents of ______________________ Junior High School Students

From the desk of ______________________________________
Principal

As we move toward the twentieth century, life is becoming more and more intricate. Thus, education for the next century must, of necessity, be broad and as all inclusive as possible.

Parma Public Schools are attempting to provide the students with not only basic training but the know-how in selecting and planning for a career.

We know that many new jobs will develop during the lifetime of your son or daughter. Thus, we hope to aid them to develop techniques for selecting and evaluating new job opportunities as well as the current ones.

This year teachers will arrange for group sessions to discuss vocations, educational planning, and numerous activities related to the World of Work. Counselors will supervise testing and arrange sessions for interpreting of test results and their significance to career planning.

Included in the career orientation will be a night for parents where the general career program will be explained. We hope you will also attend Open House later this month where teachers will relate how their subject area is involved in career planning.

Speakers will be provided, visitations planned, and numerous career references will be made available - all to aid students in developing an awareness of the careers and career decisions in the future.

Informational Materials

There are many current materials on careers and occupations which are valuable to both educators and students. The following is far from being a complete list but can serve the schools as a foundation for references on careers:

Career Files
Dictionary of Occupational Titles (DOT)
Occupational Outlook Handbook
Encyclopedia of Careers and Vocational Guidance
Audiovisual materials

A Chronicle File and a Science Research Associates (SRA) file of jobs, available in the library, lists careers alphabetically by title. These jobs are coded according to the accepted code numbers used in the Dictionary of Occupational Titles and the Occupational Outlook Handbook, and information in the files can be cross-referenced with these two sources.

Also available are free materials on occupations and jobs. There is a wealth and variety of information in the pamphlets which are offered. Professional organizations, manufacturers, and service organizations are realizing the need for current and accurate information on careers and are responding to this need by offering pamphlets, brochures, fact sheets, movies, and filmstrips for use by young adults.

DICTIONARY OF OCCUPATIONAL TITLES (DOT)

The Dictionary of Occupational Titles is a two-volume classification system of jobs and occupations. It provides a current inventory of jobs in the American economy and gives an extensive analysis and description of what each involves and what traits are needed by the worker.

1. Volume I -- Definitions of Titles

   a. Contains an Introduction which explains:

      (1) Job definitions
      (2) Occupational classification and code system used in the DOT
      (3) Arrangement and uses of the DOT

   b. The bulk of Volume I is the alphabetical arrangement of definitions of jobs. There are 21,741 separate occupations defined, known by 13,809 additional titles, making a total of 35,550 job titles defined.

   c. Job definitions are of two types - coded and uncoded, the uncoded type being alternate titles.

2. Volume II -- Occupational Classifications

a. Contains major sections in which jobs are arranged according to different groupings, have the same basic occupational, industrial or worker characteristics. The classification is a six-number code, the first number designating the major occupational group.

(1) 0-1 Professional, technical and managerial occupations
(2) 2 Clerical and sales occupations
(3) 3 Service occupations
(4) 4 Farming, fishery, forestry and related occupations
(5) 5 Processing occupations
(6) 6 Machine trades occupations
(7) 7 Bench work occupations
(8) 8 Structural work occupations
(9) 9 Miscellaneous work occupations

b. Code explanation

Teacher, Elementary School DOT Code..... 092.228

The 092 refers to the occupation grouping
0 Professional Occupation
9 a subgrouping within "Professional Occupation"
2 a subgrouping within "Professional Occupation"

The 228 refers to Worker-Trait components
2 involvement of data used by worker
2 involvement of people whom the worker will work with
8 involvement of things which the worker will use in his job

c. Glossary of technical terms used in the definitions

d. Appendices

(1) Explanation of relationship within data, people, things categories
(2) Discussion of worker-trait components

e. In using the second volume, one must refer to different sections to obtain the most complete information about a job and its description and qualifications.

3. How to find occupational titles and code

a. Look up the job titles, the definition, and the code (Vol. I)

(1) If necessary, invert the title (example: Elementary school teacher -- Teacher, elementary school)
(2) Look for possible titles (Man-of-all-work: handyman, odd-job man)
(3) Look up industrial designation if you know what industry the job is in, but you don't know the job title (Industrial Arrangement of Titles, Vol. II)
(4) Refer to Volume I for job titles, a definition and code.

b. Using Volume I, read the job definition, then turn to Appendix A in Volume II to give the description of the last three digits in the code (data, people, things categories).

If you need assistance in using the Dictionary of Occupational Titles, please see a counselor.

Occupational Outlook Handbook

The Occupational Outlook Handbook *is probably the best and most usuable single source* of occupational information. Copies are available from each counselor and in the library.

This is a one-volume source of information published by the U.S. Department of Labor and revised every two years to keep it up to date.

The *Handbook* may be used in several ways:

1. Gain an overview of the World of Work by studying the "Table of Contents" in the front of the book.
2. Look ahead to your working years by reading "Tomorrow's Jobs," on page 11-19.
3. Read about particular occupations in which you may be interested. To find a particular one use the "Table of Contents" in the front or the "Index" in the back of the book.

Over 700 occupations are discussed in the Handbook.

These 700 occupations include those of greatest interest to young people. Most of the large ones requiring long periods of education or training are discussed, as are a number of small but rapidly growing fields and other occupations of special interest.

Each occupation is discussed under the following headings:

Nature of Work
Where Employed
Training and Other Qualifications
Employment Outlook
Earnings and Working Conditions
Where to Go for More Information

For further information

For further information concerning the use of the Occupational Outlook Handbook see pages 3 - 6 of the handbook.

Encyclopedia of Careers and Vocational Guidance

This is a two-volume encyclopedia. Volume I is entitled "Planning Your Career" and includes two selections "You and Your Career" and "Career Fields." The editor says "It is expected that you will use Volume I for ideas, for guidance, and to get the flavor of the number of particularly important areas of work." Seventy-one general career areas are discussed. Each concludes with a listing of related articles in Volume II. This volume can be especially helpful in showing the variety of range of occupations in a general area. At the end of Volume I is a listing of accredited colleges, arranged by state.

Volume II is entitled "Careers and Occupations", specific occupations are grouped under these headings:

Clerical Occupations
Farming Occupations
Managerial and Official Occupations
Professional Occupations
Sales Occupations
Semi-Professional and Technical Occupations
Semi-Skilled and Unskilled Occupations
Service Occupations
Skilled Occupations

At the beginning of each group there is a general discussion. Then each of a number of occupations is discussed in terms of:

- Definition
- History
- Nature of work
- Requirements
- Special requirements
- Opportunities for experience and exploration
- Method of entering
- Advancement
- Employment outlook
- Earnings
- Conditions of work
- Social and psychological factors
- Sources of additional information

Audiovisual Materials

To assist and supplement the teaching of career information and opportunity, there is an abundance of audiovisual material available to teachers and counselors:

- Films
- Filmstrips
- Books
- Career catalogs
- Tapes
- Film loops
- Video tapes
- Handout materials and pamphlets

Implementation Activities

Many devices and activities may be used to expose students to all facets of career orientation and exploration. Each building will develop their own activities designed to fit into their facilities.

The following are a few activities:

I. Suggested Activities
II. Prerequisites to the World of Work
III. Speakers
IV. Field Trips
V. High School Course Selections
VI. Career Carnival

I. Suggested Activities

1. Group Guidance Classes:
These classes would be a part of the regular curriculum and designed to fit in with the master schedule.

2. Career Units:
These are units worked into a regular subject class. They may be a seperate unit or an on-going unit throughout the year.

3. Homeroom Period:
A career program might be organized and be presented during this period. The program could utilize time on the basis of once-a-week or more frequently as personnel felt the need.

4. School Clubs:
Career speakers and audiovisual presentations are always popular programs for school clubs to sponsor.

5. Bulletin Boards:
Attractive and up-to-date bulletin boards can arouse interest in career information, show relationships between school subjects and careers, and direct students to sources of information.

6. School Newspaper:
A special column in the school newspaper can list on-going and future career planning activities.

7. Field Trips:
Field trips can be made to local business and industrial establishments so that students may observe people at work.

8. Career Conference:
Career planning is an activity continuing through the whole year, but a concentrated period of time of special emphasis may be beneficial to allow all students a career exposure.

9. Assemblies:
Assemblies involving people from the community and parents can be informative and entertaining.

10. Small Groups:
Students interested in one career field may meet to explore and discuss related and complementary areas of specialization within a career cluster.

11. Individual Conferences:
A student with a special need and interest may need a one-to-one conference.

12. Career Carnival:

II. Prerequisities to the World of Work

Counselors are also resource persons for job entry information. Several activities could be implemented to explain and aid in the understanding of securing a job.

1. Social Security Cards (used in seventh-grade groups)

   a. Contact local social security office

   b. Assembly for entire seventh grade for introduction of social security program
   Film
   Speaker
   Question and answer period

   c. Classroom follow-up
   Further study utilizing social security literature
   Fill out applications provided by social security office.

   d. Return applications

   e. Materials for absentees available in counselor's offices.

2. Work Permits (used in eigth-grade groups)

   a. Hand out brochure explaining work permits.

   b. Explanation and discussion of methodology in securing work permits, including necessary forms.

   c. When needed, forms will be available in the office.

3. Job Applications (used in ninth-grade groups)

   a. Procedures for applying for a job:

      (1) Review of social security and work permit information
      (2) Sources for finding available jobs
      (3) Appearance and conduct while applying for a job
      (4) Filling out an actual application form utilizing AVA materials
      (5) Set up mock interview.
      (6) Discussion of "Why Don't I Get Hired?"
         (a) Lack of basic learning skills (reading, arithmetic, speaking)
         (b) Lack of basic clerical skills (spelling, filing, typing)
         (c) Lack of work world orientation and job search skills
         (d) Lack of dependability and reliability (evidenced by poor school attendance, spasmodic work history, chronic arrests)
         (e) Indifferent attitude
            1a. Poor work attitude
            1b. Distrust of authority figures
            1c. Hypersensitive to criticism
            1d. High anxiety
            1e. Lack of motivation and/or assertiveness
            1f. Appearance

b. Culminate activity by using a speaker involved in personnel work.

III. Speakers

Speakers from the business world are a great asset to understanding different careers.

IV. Field Trips

Field trips can be an exciting addition to the study of a career or job area. Throughout Cleveland many businesses and large industries are available for tours.

V. High School Course Selections

Name ____

A Tentative look into my future in respect to vocation and avocation.

In my leisure, I like to ____.

For my career (vocation), I think I would like to ______________________________
____.

My best subjects are____________, ______________, _____________, ___________.

My tests show my strong skills are _____________, _____________, _____________.

My weak skills are in _____________, ______________, ___________, ___________.

To reach my career goal, I need the following skills:

______________________________	______________________________
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________

The educational requirements for my tentative career are:

High school diploma______________	Further vocational (technical) training
College degree__________________	______________________________

High school graduation requirements: 17 credits

4 credits in English (includes 1/2 credit in speech, 1/2 credit in composition, and 1 credit in literature)
2 credits in Social Studies (must include U.S. History and U.S. Government)
1 credit Science
1 credit Mathematics
1 credit Physical Education

The 17 credits must include the equivalent of two majors and two minors

Major - Three or more credits in any one department
Minor - Two credits in any one department

(Provide form for student selection of high school courses.)

VI. Career Carnival

A Career Carnival is a means of making career information available to students. However, it is such a major project that it must, to be successful, be a project of the total school. This material is included here because the Career Carnival has been an activity of no one academic department and counselors have played a major role in it.

Since the initiation of the career education program, two Career Carnivals have been held at Pleasant Valley Junior High School -- one in the fall of 1969 and one in the spring of 1972. The Career Carnivals provide valuable information, but are very demanding in terms of staff time and community cooperation in supplying leadership.

As additional junior high schools become involved in the Career Education Program, several alternatives may need to be considered. If a Career Carnival in each school each year is not practical from a time standpoint, the activity might be rotated among schools; one school using the activity one year, another the next, etc. Possibly, a joint Career Carnival could be planned. (A joint plan has been used by the three Parma senior high schools.)

Following are some comments on aspects of the Career Carnivals held at Pleasant Valley Junior High School.

1. General Format

In so far as possible, speakers arrived during the 4th period. They were greeted by student hosts and hostesses and taken to lunch as guests of the school. This luncheon was followed by a brief period when those planning the Career Carnival might meet with the guest leaders.

For the afternoon (periods 6,7, and 8 -- or 2 hours, 30 minutes), all regular classes were replaced by the Career Carnival. This time was divided into five periods, each 25-30 minutes in length. From a list of the groups available, each student had named seven, listed in the order of his interest. In so far as possible, each was given a schedule including his first five choices. Then each student followed a school day schedule. Groups met in all regular classrooms plus the gyms, library, and cafeteria-study hall. Room assignments were planned so that the largest (most popular) groups were in the largest room.

2. Time in School Year

Ideally, a Career Carnival should be timed for maximum contribution to the on-going Career Education Program and at the time to best utilize student readiness for the information.

In Pleasant Valley, it has been impossible to divide the total school population into Career Carnival interest groups and fit them into the available space. (Total space, including gyms and study hall, could not be utilized as efficiently as for the regular school program.) Since this consideration had to take priority over the more ideal one, each Career Carnival involved two grades (7 and 9 in 1969, 7 and 8 in 1972) while one grade was out of the building on a field trip.

3. Student Orientation

Value gained from the Career Carnival increases with adequate student preparation and orientation. There is a need for student orientation in choosing of groups to attend and also in attending so as to learn the most from the presentation.

4. Scheduling Student Choices

Planning a master schedule of groups available, then *scheduling choices for each student,* proved to be a very large job -- almost as great as planning the master schedule and student schedules for the school for the year. For the first Pleasant Valley Career Carnival, all of this was done "by hand" (an overwhelming task). For the second Career Carnival, arrangements were made to have the students' schedules planned and printed (two copies each) by the Data Processing Department. Of course, these arrangements need to be made well in advance.

5. Teacher Involvement

Prior to the Career Carnival, many teachers were involved in student orientation and in suggesting and securing speakers, especially for groups related to their subject matter areas.

On the afternoon of the Carnival, a teacher was present in each group at all times. All teachers, librarians, and study hall aides in the building were called upon that afternoon. For the first Career Carnival, teachers as well as students followed schedules and rotated among groups. Interests of students, as well as teachers were honored as much as possible. Having a faculty member present in each session took precedence over teacher's personal choice. For the second Career Carnival, a particular teacher remained with the same group all afternoon.

6. Speakers and Groups Leaders

For each group there was one or more speakers -- usually a community person engaged in the occupation. For the first carnival, Pleasant Valley staff recruited the leadership -- but with a great deal of help from others in the school system. For the second carnival, a major share of the leadership recruiting was done by the P.A.C.E. Association.

Types of presentations varied. Methods of presentation included lecture, discussion, question-answer, panel presentation, films and filmstrips.

Many speakers also handed out materials to the students attending.

Evaluation and Follow-Up of the Role of Guidance Department

I. Devise questionnaire cooperatively

    1. Have all departments and staff assist.

        a. For students
        b. For parents
        c. For faculty

II. Summarize questionnaires for report to staff and coordinator.

III. Report recommended areas to be continued and areas to be changed.

LORAIN

Health

This is an example of the application of the seven developmental areas to the study of health not only as one of the job clusters but also as an academic area.

LORAIN

Health Careers Curriculum

Introduction

The preservation of health is the responsibility of everyone. It is a community responsibility to educate students to assume the responsibility for supporting and improving public health.

Health careers can provide opportunities for students with varied interest in medicine, engineering, mathematics, nursing, science, music, art, photography, crafts, sports, food and computers. These are some of the many areas of interest through which students can find meaningful expression in an occupation in the health care field. The health care field is the nation's third largest industry. It is an occupational area which offers a wide variety of opportunities. Each occupation plays an important and necessary role in the maintenance of good health care.

Many students are interested in careers in the health field. It is our desire through career education to permit students to explore the many occupational possibilities in the health fields.

This particular course will familiarize students with a wide range of health information and health occupations. It is also our aim to inform students of their responsibility for maintaining good health habits and to realize that health information and advice comes from many souces, both scientific and unscientific, including one's family and friends.

General Objectives

1. To develop a positive concept of self.
2. To develop an awareness and acceptance that work is a way of life.
3. To expose students to the wide variety of health occupations.
4. To help the student recognize his interest, abilities and weaknesses.
5. To show students how careers in the health field require varying amounts of education and training.
6. To help students interested in health fields relate their interest to course offerings.
7. To develop an awareness of and respect for all types of work and workers.
8. To understand that people work for various reasons, money, personal needs, social needs, enjoyment.

Concept: There are agencies within the community that provide information or protection regarding health hazards.

Objective: Students will be acquainted with the agencies that protect the public and the related occupations.

Learning Outcome: Students will be able to apply the information regarding health hazards to his own life.

Level	Subject	Learning Activities	Resources	Evaluation
7th	Health	1. Have students make a list of agencies which provide information or protection regarding health hazards.	1. List of Community Agencies United Health Services	1.
		2. Have students outline what services each agency provides.	2. Same as 1	2.
		3. Have a speaker from one of the agencies discuss the ways in which his agency helps the community.	3. Same as 2	3.
		a. Included in the discussion would be career opportunities in his particular agency.	3a. Ohio Employment Information series	
		b. Outline job classifications, education requirements.	3b. Vocational Biographies Nov.-Dec. 1970 Vol. 1 Sept. 1972 Vol. 11 Oct.-Nov. 1972 Vol. 12	
		4. Discuss the role of the state and federal government in community health.	4. Write State of Ohio Dept. Of Health for list of agencies	
		5.	5.	5. Write a paper on "How Community Agencies Help the Public"

Concept: There are agencies within the community that provide information or protection regarding health hazards.

Objective: Students will be given information concerning the various health hazards.

Learning Outcome: The student will be motivated to correct his own deficiencies and will be able to evaluate health information objectively.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Ask students what are some variables which motivate one's choice of health information and services?	1. Health Education "A Conceptual Approach" Level IV. Pages 8-9	1. Provide students with a list of six variables and forces that influence selection of health information and services. Have students write opposite each item three examples of how the choice or action may be influenced by one or more variables either positively or negatively. Evaluate papers on the basis of the degree to which students are able to think of examples for each variable.
		2. What are the possible reasons for seeking the services of quacks?	2. Same as 1.	
		3. Why does the assertion that cigarette smoking contributes to lung cancer deter some from smoking while others are not affected by this claim?	3. Film: Smoking Past and Present	
		3a. Students identify and criticize the various factors which are suggested by the group.	3a.	3a.
		4. Have students list the different job occupations found in the following agencies. 1. Bureau of Public Health 2. Hospital 3. Mental Hospital 4. T.B. Sanatorium	4. Dictionary of Occupational Titles 4a. Occupational Outlook Handbook 4b. Ohio Employment Information Series Part I.	4. Students will be able to list 10 occupations associated with community agencies. 4a.
		5. Have students classify these occupations under the following - 1. professional 2. semi-professional 3. technical and skilled 4. semi-skilled 5. unskilled	5. Dictionary of Occupational Titles	5. Students will understand the distinction made in occupational classification system by being able to list occupations in each category.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health (Cont)	6. Students will be able to identify the following terms: 1. variable 2. quack 3. professional 4. semi-professional 5. semi-skilled 6. unskilled 7. technical 8. skilled		6. Students will be evaluated on their knowledge of the following terms. 1. variable 2. quack 3. professional 4. semi-professional 5. semi-skilled 6. unskilled 7. technical 8. skilled

Concept: There are many institutions within the community that provide health services.

Objective: Students will explore the various health occupations related to health services within the community.

Learning Outcome: Students will become familiar with health services within the community and related occupations.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. List institutions within the community that provide health services.	1. United Community Services	1. Students will be able to list ten agencies and the services they provide.
		1a. Under each listing have students find out the type of health services provided.	1a.	1a.
		1b. List occupations within the various health services. Under each listing have students look up qualifications, educational background, type of occupation.	1b. Dictionary of Occupational Titles	
		1c. Have students classify occupations under the following: 1. professional 2. semi-professional 3. technical and skilled 4. semi-skilled 5. unskilled	1c. Occupation Outlook Handbook 1d. Ohio Employment Information Series (Part I) 1e. same as d.	
		2. Director of Public Health Services in Lorain (Teacher can utilize speakers from other agencies being studied).	2. Resource Speaker 2a. Film We Served	2a. Discuss information gained from the film and speakers.
		3. Provide students with "hands-on" experience by visiting the local health agencies.	3. Field trip	3. Write a brief report on things students observed on the field trip.

Concept: There are many institutions within the community that provide health services.

Objective: Students will be acquainted with health services provided within their community.

Learning Outcome: Students will understand how to secure health services within his community.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Divide the class into small groups of four or five students. Each group is assigned the task of developing a check list of questions which can be used as criteria for evaluating health services or information.	1. Health Education A Conceptual Approach Level IV.	1. Appraise procedure outlined by students in choosing medical and dental advisors as directed by problem solving inquiry process
		2. Make sure that two groups are developing criteria for health services and health information respectively.	2. United Community Services	
		2a. Examples of such criteria which might be developed by students examining the qualifications of a health advisor. 1. Professional background 2. Associated with an accredited hospital? 3. Is he a member of the medical association? 4. Is he trying to improve your health or his wealth? (The same type of criteria can be developed for other health services.)		
		3. Have students interview parents and adults to determine how they select their physicians, dentists and health specialists.	3. Film The Problem of Quackery in Health Services	3. Develop criteria for parents and adults selecting of dentist, health specialists, physicians.

Concept: There are workers within the community that must have a thorough knowledge of first aid.

Objective: Students will be familiarized with occupations where a knowledge of first aid is required. To give students the ability to act in emergency situations.

Learning Outcome: The student will have a understanding of emergency procedures as they relate to health and other occupations that require a knowledge of first aid.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. List occupation that require workers to have a knowledge of first aid.	1. Dictionary of Occupational Titles.	1. Students will be familiar with these occupations
		2. Have several speakers come to the school and talk to the students on how the knowledge of first aid is important on their jobs.	2. Fireman, Policemen Ambulance driver	2. Discuss and evaluate information gained by speaker.
		3. Classify newspaper articles according to different types of accidents.	3. Film Emergency 77	3.
		4. Discuss the number of workers involved in administering assistance to accident victims. a. job classification b. education c. special training	4. Local statistics on number of persons employed in these occupations.	4. Students will understand meaning of job classification.
		5. Role-play accident situations having students perform various duties of emergency personnel.	5. Person to demonstrate first aid procedures.	5. Students will discuss how they would react in simulated emergency situations.
		6.	6.	6.

Concept: An understanding and acceptance of self is important throughout life.

Objective: To help students understand that each personality is unique and to indicate to students how they can improve their personalities.

Learning Outcome: Students will cultivate attitudes and habits that are conducive to good relationship with others. They will realize that everyone can change and improve his personality.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Discuss the psychological needs of people and show how work can satisfy these needs.	1. Occupational View Deck	
		2. Ask each student to choose a health occupation. Have them write a personality sketch of the kind of person who would be suited for the occupation.	2. Occupational Outlook Handbook	
		3. Have students define the following careers. a. psychologist b. psychiatrist c. psychometrists	3. Dictionary of Occupational Titles	
		4. Have a psychologist talk with students concerning personality development and how individual personality changes.	4. Health Careers Kit	
		5. Have students discuss various personality types and temperaments.	5. Speaker - school psychologist	5. Have students write a paper dealing with strengths and weaknesses

Concept: An understanding and acceptance of self is important throughout life.

Objective: Students would find out if they have the personal qualification to be successful in a health career. They will identify their own value system.

Learning Outcome: The student will have a better understanding of himself.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. Discussion session with students to focus on values, such as work, thrift, honesty, promptness, dependability, involved in specific occupations.	Career Education Resource Guide Too Many Chiefs	
		2. Have students write a resume listing his strengths and weaknesses.		
		3. Each student will write a portrait of himself entitled "Who Am I" in which he includes a brief physical description of himself, discusses his present interest, tells the kind of person he most admires, and what he hopes to do after high school.		
		4. Have a resource person discuss with the class personal qualifications for entering the health field.	Personnel director of local hospital	
		5. Have students research a number of health occupations to find out the following information Functions Duties Working Conditions Personal Qualifications Educational Requirements Educational Opportunities	Employment Information Series	

Concept: Persons need to be recognized as having dignity and worth.

Objective: Students will develop an understanding of and respect for persons who are different.

Learning Outcome: The students will learn to value the rights of others as well as their own rights.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. Have students list factors that may cause conflict situations that might arise between persons, such as a. lack of communication b. misunderstandings c. personality differences d. jealousy	1. "Constructive Confrontation," Career Education Resource Guide, page 160 1b. Film The Beholder	1.
		2. Rap sessions with students to focus on values, work, thrift, honesty, involved in specific occupations. a. doctor b. nurse c. medical secretary d. laboratory technician e. x-ray technician	2. Film Acting with Maturity	2. Write an essay comparing the problems of teenagers in understanding older persons and those of parents in trying to understand teenagers.
		3. Explain the use of the Career Kits to students and provide some for students to work with in class.	3.	3.

Concept: Persons need to be recognized as having dignity and worth.

Objective: Students will demonstrate how each person's work contributes to the welfare of society and that each individual possesses a distinct set of abilities.

Learning Outcome: To respect the dignity and worth of each individual with whom we associate.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Project: Study the organization of a hospital. Analyze how each person's job contributes to the efficiency of the operations.	Public relations director of local hospital	
		2. List a range of abilities that persons may possess.	2.	2.
		3. 8th grade students will be administered the O.V.I.S. Have results interpreted to the students.	3. Film Code Blue	
		4. Ask students to play roles of client and employment counselor. Client expresses desire to follow a particular vocation and counselor asks questions about temperament, interest and abilities of client in relation to that vocation.	4. Community Careers Fair 4a. Career Education Resource Guide page 77 4b. "Abilities & Ambitions," Career Education Resource Guide, page 163	

Concept: Occupations exist for a purpose.

Objective: Students will demonstrate that occupations exist to produce goods or services. Health occupations are service occupations.

Learning Outcome: Students will understand how the health occupations contribute to the welfare of society.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. Discuss personnel experiences of students related to health services they or their families have used recently. List the health occupations involved.	1. Representative from the local health department to explain local health services.	1. Check students' understanding of local health services.
		2 Define these occupations	2. Film To Seek To Teach To Heal	2. Objective Test Students define health occupation terms.
		a. General Practitioner b. Specialist	2a. Occupational Outlook Handbook	
		c. Pediatrician	2b. Dictionary of Occupational Titles	
		d. Opthamologist e. Orthopedic	2c. Bulletin board display on health occupations	
		f. Podiatrist g. Nurse h. X-Ray Technician i. Lab Technician j. Physical Therapist k. (Others)		
		3. Field trip to local hospital to observe people at work in the various departments.		3. Students will discuss field trip to hospital. They will write a brief report on things that interest them.

Concept: Occupations exist for a purpose.

Objective: Students will demonstrate that health occupations contribute to the welfare of the community, the country and the world.

Learning Outcome: Students will understand how the health occupations are interrelated.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Have students list and define as many health occupations as possible.	1. Occupational Outlook Handbook 1a. Dictionary of Occupational Titles	
		2. Have students interview someone in a health field to determine why they chose the field.	2. Speaker - Discuss how health occupation contributes to the welfare of the community.	
		3. Draw a comparison between the availability of doctors in the early days of our country and presently.		
		4. Answer the question -- "Do we have adequate numbers of persons in the health fields in our community?"	4. Speaker-- The local director of the medical association	
		5. Discuss how the development of improved health services are related to society's desire to improve the quality of life.	5. Film Corps Profound	
		6. Field trip -- visit the Cleveland Health Museum for the purpose of determining what advancements have been made in the health fields.		
		7. Identify some careers that function in support of health services.		

Concept: There is a wide variety of health careers which may be classified in several ways.

Objective: Students should understand that workers in the health fields give service to humanity.

Learning Outcome: Students will have a through knowledge of the health career fields.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. Discuss with students the various ways that health careers can be classified.	Use D.C.T. for data-people things classifications	
		a. Education		
		b. Skill and training		
		c. People directly related to patient care.		
		Example: Nurse Physician Orderly	Speaker -- patient care occupations and support occupations	
		d. Those that operate in support of patient care.		
		Example: X-Ray technician Laboratory Assistant Office Staff Maintenance		
		2. Have students make posters on health careers in which they are interested.		
		3. Have students survey one occupation dealing with patient care and one dealing with support.		Evaluate job surveys

Concept: There are many institutions within the community that provide health services.

Objective: To explore the various health occupations related to health services within the community.

Learning Outcome: Students will understand how to secure health services within his community.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Divide class into small groups of four or five students. Each group is assigned the task of developing a check list of questions which can be used as criteria for evaluating health services or information.	Health Ed. A conceptual Approach Level IV Page 29	Appraise procedure outlined by students in choosing medical and dental advisors as directed by problem solving inquiry process.
		2. Make sure that two groups are developing criteria for health services and health information respectively. Examples of such criteria which might be developed by students examining the qualifications of a health advisor. a. What is his professional background? b. Is he associated with an accredited hospital? c. Is he trying to improve your health or his wealth? d. Is he a member of the medical association? The same type of criteria can be developed for health services.		
		3. Have students interview parents and adults to determine how they selected their physicians, dentists, and health specialists	Film The problem of quackery in health services	Develop criteria for parents' and adults' selection of physicians, dentist.

Objective: Students will understand that each personality is unique and to indicate to students how they can improve their personalities.

Learning Outcome: The students will cultivate attitudes and habits that are conducive to good relationships with others. They will realize that everyone can change and improve his personality.

Level	Subject	Learning Activity	Resource	Evaluation
8th	Health	1. Discuss the psychological needs of people and how work can satisfy these needs.	1.	1.
		2. Each student will choose a health occupations and write a personality sketch of the kind of person who would be suited for the occupation.	2. Health Careers of Ohio Careers Health Kit Occupational Outlook Handbook, D.O.T.	2.
		3. Define the following careers: a. psychologist b. psychiatrist c. psychometrist	3. Film Horizons Unlimited (Modern Talking Picture Service)	3.
		4. Have a psychologist talk with students concerning personality development and how people can change.	4. Practicing psychologist or school psychologist	4. Devise a rating scale that students may use to score their own personality.
		5. Have students discuss personality types and temperaments. List desirable vs. undesirable personality traits. Have students discuss ways that people can change.	5. Film A Time of Change Occupational View Deck	5.
				6. The students will write a paper listing their strengths and weaknesses.

There is a wide variety of health careers which may be classified in several ways.

Students will be aware of the wide range of opportunities in the health field.

Students will be familiar with the sources of information on health careers.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Have students make up list of health occupations that require various amounts of education. Example: Certificate Baccalaureate Degree High School Diploma Graduate Professional training	Health Careers Educational Guide Greater Cleveland Hospital Association	
		2. Classify health occupations according to: a. professional b. semi-professional c. technical and skilled d. semi-skilled e. unskilled	Film In a Medical Laboratory Portrait of an Internist	
		3. Have guidance counselor talk to class concerning selection of high school courses as they apply to classifications in 1 & 2.	Ohio Health Career Packet. Hospital personnel director will discuss classifications	

Concept: Individuals can find self-expression in the work they do.

Objective: Students will understand that the health fields offer opportunities to individuals with a variety of personality traits and character traits.

Learning Outcome: Students would be aware of how they might fit into a health occupation based on their personality and character traits.

Level	Subject	Learning Activity	Resources	Evaluation
8th	Health	1. Have students participate in your work sampling according to their individual interests so they may learn more about themselves in relation to what is expected of a worker.	1. Gather work sampling material from the health fields. Use Dictionary of Occupational Titles	1. Students report on work sampling activities
		2. Arrange for student interviews, role-playing situations where students play the role of employer and employee.	2. Director of personnel or person from an employment agency	2. Check for understanding of preparing for an interview.
		3. Have students pick three health occupations they would like to know more about. Have students list skills, training, abilities, types of personality traits, for each job.	3. Students will use the D O T for informa-which relates to job and himself.	3. Evaluate job surveys

Concept: Individuals can find self-expression in the work they do.

Objective: Students will demonstrate how one's personality affects the choice of a career and that his character traits may affect his career.

Learning Outcome: Students would be aware of how they might fit into a health occupation based on their personality and character traits.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. Demonstrate the occupational view deck. Have students do temperament check list.		1. Students will understand their own temperament.
		2. Make a list of health occupations students would be interested in knowing more about. Have students look up pertinent information concerning the occupations they chose.	Dictionary Of Occupational Titles	
		3. Student can organize a slogan or poster contest on the theme "It pays to plan your High School Career."	3. Art Teacher	
		4. Invite a staff member of the Ohio State Employment Office to talk about the minimum skills and personality characteristics that employers require.	4. Speaker - Representative of Ohio State Employment Service	4. Have students define personality

Concept: Education and work are interrelated.

Objective: The student will be able to know how careers in the health fields require varying amounts of education and training.

Learning Outcome: Students will have a knowledge of health occupations as they relate to varying amounts of education.

Level	Subject	Learning Activity	Resources	Evaluation
7th	Health	1. Have students plan courses for a future as a nurse, doctor, medical secretary, x-ray technician, laboratory assistant. 2. Students will construct a bulletin board showing the different types of jobs in the health field. 3. Students will interview a nurse, doctor, medical secretary, x-ray technician, laboratory assistant to find out what subjects they took in preparing for their occupations. They will also discuss their likes or dislikes about their jobs.		

ORRVILLE

Health

The Orrville City Schools Health Unit has an extensive list of resources that will be helpful to all teachers in dealing with this subject area.

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Unit II - Promoting Your Mental Health

Unit III - Growing Toward Maturity

Unit IV - Developing an Understanding of Sexuality

Unit V - Developing Sound Food Practices

Unit VI - Promoting Your Oral Health

Unit VII - Achieving Vitality for Living

Unit VIII - Concerning Your Vision and Hearing

Units IX - Preventing Misuse of Drugs, Alcohol, and Tobacco
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Units XII - Prevention and Control of Communicable Disease and Chronic Illness
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Unit XIV - Preventing and Eliminating Environmental Contamination

Unit XV - Living Safely

Unit XVI - Selecting Medical Products

Unit XVII - Solving Future Health Problems (Also see Future Health Opportunities)

Appendices
  Supplementary Academic Materials
  Jobs Related to Health

Testing and Guidance Program

Objectives

The objectives of this program are to develop in each elementary student an awareness of a number of occupations in the various career clusters; to cultivate and expand this interest and awareness in junior high students for greater career orientation; and to assist high school students in self-appraisal and exploration relative to specific career opportunities.

K-6. The objectives of the career motivation level of this program are to develop a respect for all work; to develop an awareness of the wide spectrum of jobs and careers through an exposure to this spectrum; and to motivate each student to participate in the work with the understanding that this is a part of life.

7-8. The objectives of the career orientation level of this program are to familiarize all students, through "hands on" and classroom experiences, with a variety of vocations in at least three career clusters; to help all students identify their own interests in various vocations; and to expose all students to the type of training needed for entry into these vocations.

9-10. The objectives of the career exploration level of this program are to familiarize all students, through "hands on" and classroom experience, with a variety of vocations relative to their own aptitude and interests; to expose each student to at least three occupational taxonomies through on-the-job experiences in business, industry and at the Wayne County Joint Vocational School; and to utilize co-curricular activities as vehicles for career oriented experiences.

This program should help bridge any gaps that exist between the academic environment of the school and community living. As a result of the integration of the following activities, students will cease to look at education and living as two separate entities but will realize that education and life are one.

Unit I - Developing Your Concept of Health
(also Health Services Unit XVI)

Related Behavioral Objectives

1. After visiting the hospitals and viewing the film, the students will be able to describe and explain some of the jobs that personnel in the hospital perform.

2. After visiting the hospitals and viewing the film, bulletin boards and notes, students will be able to name the jobs of at least six to eight of the persons that work in a hospital.

3. After the reports on the educational requirements of the personnel in the hospital, the student will be able to specify the job description and educational requirements of at least six jobs.

4. After making the trip to two general hospitals, students will be able to write down the basic differences in philosophies in the hospitals.

5. After studying the bulletin board display, students will be able to list the main departments in the hospitals.

6. Having seen the film or slides on the hospital, the students will be able to explain the services available to them from a hospital.

7. Having visited a larger hospital, the students will be able to list the additional services available in a larger hospital compared to local hospitals.

8. Having heard the candy stripers talk, the students will be able to describe and list their main duties.

Procedure

1. Contact the local hospital administrators and make arrangements for job interviews with personnel.

2. Match the students with the person to be interviewed.

3. Decide the questions to be asked.

4. Organize the students in committees to work on the bulletin board displays.
5. Discuss the resources available for their work.

6. Generally discuss what comprises a good bulletin board display and background information on this.
7. Organize students to research job description, job qualifications, advantages and disadvantages of the jobs under study.

8. Assign a committee to research and report on the local hospitals.

9. Arrange their interview with the administrator or doctor from both hospitals. They may tape this interview.

10. Assign a committee to research and organize information concerning the various departments in the hospitals and the personnel. They should work with the bulletin board committee. They should also develop a sheet to be duplicated and passed out to students for note taking and studying this material in an organized manner.

11. Secure a film or slides on the hospitals well in advance of the presentation.

12. Make arrangements for the hospital tour of the various jobs and services available. This might be for all 7th and 8th grade students or only for interested students.

13. Make arrangements to talk with a local student who is a candy striper.

14. Discuss with students some questions they can ask the candy striper about her job and other jobs that they have heard about that students can do that relate to hospital work.

Activities

1. Select student representatives from the various classes to visit and interview specific individuals in the two hospitals. (Students should have interest in the job.) Include the following vocations:

   Doctors
   Head Nurse (possibly)
   Licensed Practical Nurse
   Nurses Aid
   Medical Assistant
   Candy Stripers
   Ward Secretary
   Hospital Attendant
   Receptionist
   Medical Records Librarian
   Orderly
   Lab Technician
   Bacteriologist
   Pathologist
   Other lab workers

2. Have students research the educational requirements for some of the jobs in which they express interest. Also the advantages and disadvantages.

3. Have a committee write up a list of all the persons involved in hospital work. This will be passed out to students for note taking of the job description and educational requirements.

4. Assign a committee to make a bulletin board display of the various departments in the two hospitals with colorful illustrations of the various works.

5. Show a film or slides on the work of the hospital and the various workers.

6. A specific interview should be assigned to two students to interview the administrator or a doctor in both hospitals in which an overview of each hospital's philosophy is explained.

7. Organize a committee to prepare a bulletin board dealing with careers in health and health-related areas as we study them. Rotate committee members each month to help keep a fresh flow of ideas.

8. Visit a large hospital.

9. Invite a local student who has worked as a candy striper to relate some of her work experiences and those of other students working in related health jobs.

Resources

*1. Career Booklets by Institute for Research

*2. Science Research Associates Career Series and Occupational Exploration Kit (SRA)

3. Dunlap Hospital, Orrville

4. Wayne General Hospital, Orrville

5. Slides of these two hospitals

6. Films

Horizons Unlimited #3033 (28 min.)
Modern Talking Pictures
2238 Euclid Avenue
Cleveland, Ohio 44115

We Haven't Had that Yet #3470 (14 min.)
Modern Talking Pictures, 1960
2238 Euclid Avenue
Cleveland, Ohio 44115

A Place to Get Well (20 min.)
Merck Sharp & Dohm Film Lib.
West Point, Pa. 19486

7. Filmstrips

School Health Today, 1951, (silent)
National TB-Respiratory
Disease Association
1740 Broadway
New York, New York 10019

8. AV Center-School

*9. Educators Index of Free Materials

*10. Grade Guide of Educator Index to Free Material, Educators Progress Service, Randolph, Wis.

*11. Occupational Literature by Gertrude Forester.

12. School Library

*13. Government Occupational Handbook of Information on Careers

*14. Educators Guide to Free Filmstrips, Educators Progress Service, Randolph, Wis.

*15. Education Guide to Free Films,
Educators Progress Service
Randolph, Wis.

*16. Educators Guide to Free Science Materials

*Note - These will be used in the reference list in all units.

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Also free career leaflets:

1. "Mental Health Careers," single copy free, National Association of Mental Health (contact local)

2. Health Career Leaflets;
   "Medical Record Librarian"
   "American Medical Record Assistant" from American Hospital Association
   840 North Lake Shore Drive
   Chicago, Ill. 60611

3. "Your Opportunities in Medicine" by Charles Pfizer and Company, Inc.
   Educational Services Department
   235 East 42nd Street
   New York, N.Y. 10017

4. "What does a Nurse do?" by American Hospital Association
   840 North Lake Shore Drive
   Chicago, Ill. 60611

Unit II - Promoting Your Mental Health

Related Behavioral Objectives

1. Having heard the probation officers discussion on his work and the various other professions related to this work, the students should be able to describe the work these persons do and how they relate to a specific case or problem.

2. Having viewed the filmstrip or film on a state institution or had a worker as a guest speaker, the student should be able to describe the atmosphere in that institution and list the various workers.

3. Having viewed the film or filmstrip and used the outlined study sheet, the student should be able to describe the work and functions of the various kinds of state, national, local, and private and public institutions and name a variety of the jobs available in these situations.

4. Having heard a taped interview or speaker, the student will be able to describe the work of a social worker in the different job situations discussed, the advantages and disadvantages, opportunities, and educational requirements.

5. Having done the background work mentioned above, the student should be able to pick out specific problems and generally list the persons available for help.

6. Having summarized the desirable personality characteristics in the areas of mental health related work, the students should be able to list these.

7. Having studied the material on the bulletin board and display on a specific institution, the student will be able to name some of the various departments and the variety of persons that work in the institutions.

8. Having observed a TV program directed at personal adjustment problems, the students should be able to identify problems and make reasonable suggestions about where these persons should and should not seek help.

Procedure

1. Contact a probation officer who works with the courts in the city.
2. Have a committee research the job and compile questions they would like answered.
3. Assign a committee to work on compiling a list of the different institutions, private and public, in mental health that have been studied and the various personnel involved.
4. Have this committee work on the bulletin board display committee.
5. Select several TV programs in two consecutive days. Assign the students to watch one of these programs.
   a. They are to select a problem or several problems that occur in the show.
   b. They are to analyze what the person did to solve his problem or plans to do.
   c. They are to analytically evaluate his procedure.
   d. They are to make recommendations or suggestions.
6. Set up the buzz groups and have a secretary appointed to take notes on the kinds of persons they like to talk to and do not like to talk to and relate this discussion to the areas studied.

7. Select a film or filmstrip on mental institutions -- the different kinds and the various vocations.

8. Contact the head of social workers at a state hospital for a talk to the class or taped interview.

9. Discuss with students possible questions and compile a list which can be presented to the worker in advance.

10. Contact a student's parent that works at Apple Creek to give a talk about her job and about the work that students might be able to do for experience.

11. Have students write up a case study of a fictitious person or someone they know and list persons that could possibly help them.

Activities

1. Invite a probation officer to speak on specific case studies. Have speaker relate psychologists, psychiatrists, social workers, and guidance centers to his job.

2. Filmstrip or film on a state institution, its operation and personnel. Social work filmstrip. Professional or an aide or orderly.

3. Invite worker from a state institution to talk about the atmosphere and the various personnel involved in that work. Use student's mother or relative as resource person. Include such jobs as recreation leaders, houseparents, school teacher, administrator, clerical staff, secretaries. Ask questions on work students can do there as volunteers.

4. Invite speaker or have a taped interview on the work in institutions and the social worker's role.

5. Have a committee investigate and outline the qualifications of some of the personnel studied in the area of mental health and determine education requirements, rate of advancement, advantages, and disadvantages of occupation.

6. Have students write up a case study of an individual and ask class to explain the persons that would be available for help. (Should have a cross section of different problems and disorders).

7. In buzz groups have students describe the kind of personality required in these areas, i.e., guidance workers, case workers, psychologist, psychiatrist, social worker. What kind of person do you like to talk to? What kind of person do you not like to talk to?

8. Have the assigned bulletin board committee set up a display on a specific state institution such as Apple Creek and illustrate various departments and workers involved.

9. Observe TV programs that are directed at personal adjustment problems. Criticize the evaluation of methods used in solving problems. Make selective list of programs for two days. Require watching one program.

10. Have a representative of Boys Village tell about life there and jobs related to this type of work.

Resources

1. Ohio State Department of Mental Health for film or filmstrip and pamphlets.
2. Probation officer in city government.
3. Apple Creek
4. Head of social workers at state hospital.
5. IFR
6. SRA
7. Occupational Handbook of Information on Careers (government)
8. TV
9. Guidance center
10. Boys Village
11. Film The Time of Growing, 1965 (29 min.)
    Metropolitan Life Insurance
    N.Y., N.Y. 10010

Unit III - Growing Toward Maturity

Related Behavioral Objectives

1. Having heard a pediatrician and obstetrician or gynecologist, the students will be able to describe their work and the educational requirements.

2. Having heard the general practitioner's talk, the students should be able to list the educational requirements, the advantages and disadvantages, and his relationship to specialized doctors.

3. Having studied the material compiled by the student committee and had a discussion on these doctors, the students will be able to name these doctors and describe their roles and functions in people's lives.

Procedure

1. Contact a pediatrician, obstetrician, or gynecologist and arrange an interview with a student.

2. Assign student for this taped interview.

3. Compile questions during class discussion that you wish to have answered by these specialists.

4. Set up a committee to make some posters on these areas.

Activities

1. Assign two students to report on an interview with a pediatrician and an obstetrician or gynecologist on tape concerning the educational requirements, the rewards of their profession and shortcomings, some interesting experiences, their role in the lives of pregnant women, the young mother, and the child.

2. Have a committee of students compile an outline of the above information for the students as a study guide of these professions.

3. Get a general practitioner to tell about his work, the advantages and disadvantages compared to a specialized area, and his relationship to other fields of medicine. Allow for opportunities for students to ask questions.

4. Discuss these doctors and their role in the student's life.

5. Assign a committee to make some posters with clippings that illustrate the roles of these various doctors in our lives.

Resources

1. Tape or videotape of interview.

2. Magazines with illustrations

3. SRA

4. IFR

Unit IV - Developing an Understanding of Sexuality

Related Behavioral Objective

1. Having heard the marriage counselor and discussed the various aspects of his job and studied the outline in class, the students should be able to list his various functions, educational requirements, the advantages and disadvantages of this work.

2. Having done the outline for the class, the student should be able to organize pertinent information concerning careers quickly and efficiently, particularly as it relates to himself.

3. Having written questions to ask of a marriage counselor, the students should be able to ask pertinent questions of persons in various careers.

4. Having role-played, a student should better be able to describe the functions of a marriage counselor and the kinds of help they have to offer.

Procedure

1. Contact a marriage counselor and notify him of areas you wish to have discussed.

2. Set up committee of students. They will compile list of questions to be given to marriage counselor.

3. Have a committee research the educational requirements, the job description, and advantages and disadvantages of this job.

4. Assign role-playing activity to a buzz group and ask students to choose a role and setting relating to (a) problem and going to see counselor and (b) counseling before marriage.

Activities

1. Secure a speaker who is a marriage counselor (or in the area of guidance) who discusses his work as related to counseling. Tape this speaker.

2. Have questions compiled by students concerning this profession given to speaker in advance.

3. Have a committee compile an outline of the educational requirements, job opportunities, advantages and disadvantages of this profession.

4. Have students role-play a situation
   (a) where they have marriage problem, and go to marriage counselor.
   (b) when they are going to get married and want counseling.

Resources

1. Marriage counselor (reference from guidance department).

2. SRA

3. IFR

V. Developing Sound Food Practices

Related Behavioral Objectives

1. Having heard the school dietician and had a class discussion, the students should be able to describe the eating habits of students, what a good menu consists of, the problems in a job of this type, and the qualifications.

2. Having heard the hospital dietician, the students should be able to list and describe the responsibilities as well as job training and qualifications for this work.

3. Having heard the food technologist and studied research material, the students should be able to list the job opportunities available in food technology as well as the job qualifications, advantages and disadvantages of this work.

4. Having heard the above speakers, as well as discussion and practice in making balanced menus, the students should be able to objectively view menus for balance in nutrition and constructively criticize eating habits of fellow class members, and be able to select foods that comprise a balanced meal.

Procedure

1. Contact the school dietician and make arrangements with high school cafeteria for tour of facilities.

2. Set up committee. Then decide the areas you would like the school dietician to discuss, having had a class discussion on this area with students.

3. Make arrangements for students who work in the cafeteria to talk about their jobs.

4. Make arrangements for the hospital dietician to talk to class. Make list of specific areas you wish to have covered.

5. Contact food technologist. Ask him to talk about his work and other job opportunities in research.

6. Assign students to plan balanced menus. Make posters of these.

7. Select typical menus of students, put on board and criticize.

8. Assign committees to compile job qualifications and job description of these workers. Have them outline these and pass out to all students.

9. Assign committee to make posters on these jobs studied.

Activities

1. Have the school dietician speak to the class about her job.

2. Through committee work, ask students to compile questions they wish to ask her about eating habits of students, the planning of the school menus, problems and satisfaction of job, qualifications and other pertinent questions.

3. Ask the dietician from the hospital to tell about her job (taped interview).

4. Ask a food technologist to talk about the research work she performs.

5. Using posters have students make well balanced menus for at least three days meals.

6. Place menus on blackboard so that students can analyze and criticize works of peers.

7. Have committee of students compile the job qualifications and job description of the dietician in the hospital and school and the food technologist, and list other related jobs. These should be handed out to the students in outline form.

8. Have committee assigned to make posters to help students picture these jobs and the qualifications necessary.

9. Visit the school cafeteria and see what jobs are involved.

10. Have student who works in cafeteria explain his job and the various procedures.

Resources

1. School dietician

2. Materials on nutrition from Heart Association.

3. Forresters Guide to Free Literary Material.

4. Educators Index of Free Materials

5. Filmstrip
    Take a Good Look (12 min.)
    Association Film Inc.
    (film on careers in dietetics)
    512 Burlington Avenue
    LaGrange, Ill. 60525

    #14 Food Production series
    (careers in these areas)
    Listening Library, Inc.
    1 Park Avenue
    Old Greenwich, Conn. 06870

6. Film
    Search for Meaning #3291 (5 1/2 min.)
    Modern Talking Picture
    (career dietetics)

    Free Guidance Materials
    "Dietetic Internship"
    American Dietetic Association
    620 North Michigan Avenue
    Chicago, Ill. 60611

    "Careers in Nutrition"
    American Institute of Nutrition
    Rockville Pike
    Bethesda, Maryland 20014

VI - Promoting Your Oral Health

Related Behavioral Objectives

1. The students should be able to list and describe the variety of jobs available in the area of dentistry.
2. The students should be able to specifically tell about the work a dentist and dental assistant does, their job requirements, education, and training.
3. The student should be able to describe a good oral health program.

Procedure

1. Contact a dentist and dental assistant and make arrangements for their talk.
2. Set up discussion for finding out questions students wish answered in these areas. Have assigned committee compile these questions to be given to speakers ahead of time.
3. Assign committee to organize material studied so that students will have study guide to follow.

Activities

1. Invite a dental assistant (dental hygienist) to speak about her job--advantages and disadvantages, educational requirements, training.
2. Invite a dentist to talk about his job, advantages, disadvantages, educational requirements, other opportunities and other areas relating to dentistry and care of the teeth.
3. Have students list questions they would like answered concerning these areas. Have committee compile list of relevant questions they can present to dentist and dental assistant ahead of time.
4. Set up committee to work on organizing this material and hand out to students for study guide.

Resources

1. SRA
2. IFR
3. Dental Health Association, AMA
4. Forresters Handbook of Occupational Literature
5. Videotape - tape recorder
6. Film
   Lab of the Body (28 min.)
   American Dental Assoc.
   Bureau of Audiovisual Service
   211 E. Chicago Ave.
   Chicago, Ill. 60611
7. Educators Index of Free Materials
8. Dental Assistant
9. Dentist

Free Career Material
"Dental Assisting,"
American Dental Assistants Association
Room 1230 211 E. Chicago Ave.
Chicago, Ill. 60611

VII. Achieving Vitality for Living
(Relate to Physical Education throughout Year)

Related Behavioral Objectives

1. The students should be able to list the advantages and disadvantages of going into recreation.

2. The students should be able to name many of the job opportunities available in physical education and recreation, the educational requirements and how and where one can get experience in these areas.

3. The student interested in these areas should seek experience in the physical education department's activities.

4. The students should be able to name other professions that relate to physical education and recreation-- such as writers and artists.

5. The students should be able to relate these activities to other professions as well.

6. The students will pursue and seek to get specific experience in the vocational areas in which he is interested in our school situation.

7. The students will be able to identify common foot problems.

8. The students will be able to walk properly or will know where to seek help.

9. The student will know the work of a podiatrist and his job qualifications.

10. The students will be able to explain the importance of relaxation in our day - to - day living and be able to identify specific activities that encourage relaxation.

11. The student will maintain good posture and be able to generally identify and correct the simpler posture problem.

12. He will be able to specify where he can go for help in problems of posture.

13. The student will participate in physical activities throughout his life to maintain physical fitness.

14. The students will describe a program for keeping physically fit as it relates to himself.

15. The students will be able to describe the research aspect of physical education.

Procedure

1. Invite recreation department head for talk. Explain area coverage wanted.

2. Invite YMCA representative to talk on opportunities in this area and tell about the YMCA, YWCA, programs.

3. Work with physical education teacher in seeing that interested students get maximum exposure in leadership, planning, and specific experiences in activities and programs.

4. Assign students to compile list of recreation activities and opportunities in recreation and related jobs.

5. Arrange for panel discussion of high school or college students on work available in the summer and during school in areas of recreation and physical education.

6. Assign committee to head compiling clippings of opportunities in recreation and physical education to be used in bulletin board or poster display.

7. Put up drawings in locker room done by artists.

8. Contact artist and inform him about areas students are interested in.

9. Contact podiatrist to schedule his visit. Explain areas to be covered.

10. Ask physical education instructor to tell about rest, relaxation and exercises.

11. Assign students to role-play physical education instructor seeking posture problems and corrections.

12. Role-play physical education instructor and importance of physical fitness.

13. Assign students in groups to check pulse rates and recovery rates. Compile statistics.

14. Have students order booklets on job opportunities, physical fitness and other areas.

15. Order film on podiatry.

Activities

1. Invite recreation department head to talk about various opportunities in the area of recreation, also advantages, disadvantages and educational requirements.

2. Invite YMCA representative to talk about opportunities in areas and the function of the organization.

3. Constantly work in conjunction with physical education classes to give students an opportunity in planning activities, leading activities, helping teach activities by squad system, demonstration system, use of gym assistant, and officiating various activities.

4. Have students list as many opportunities as they can in the different areas of recreation and physical education and the personnel they think would be involved in this work.

5. Have a panel discussion by some high school or college students on the work available in the summer for students in the areas of recreation and qualifications necessary for various jobs.

6. Have students bring in colorful clippings of pictures which give ideas for opportunities in recreation and physical education. Use in bulletin board or posters.

7. Have talented student do large colorful drawings that relate to physical fitness and art job opportunities in this area.

8. Have an artist talk about the opportunities as medical illustrator and other related areas.

9. Invite a podiatrist to speak on his work, job qualifications, experiences and also on common foot problems related to posture.

10. Have the physical education teacher tell about job opportunities and requirements, and discuss rest, relaxation importance in our society and specific hints and exercises.

11. Have students role-play as physical education person looking for posture problems in in class and what the students can do to make corrections.

12. Have students role-play the position of a physical education person talking about the importance of physical activities in maintaining good health and optimum living.

13. Have students keep records of pulse rates and recovery rates as a researcher might. Also do physical fitness tests which might be used in compiling data.

14. Bring in recreational booklets and explore job possibilities as related to these areas.

15. Have students role-play by looking at others' feet and seeing problems of the feet and improper fitting of shoes.

16. Secure a film on proper fitting of shoes.

Resources

1. IFR

2. SRA

3. Film Catalog

4. Forrester's Handbook of Occupational Information

5. Write to Ohio Regional Medical Programs
   (Health Careers in Ohio)
   P.O. Box 5574,
   Columbus, Ohio 43231

6. H.E.W.

7. American Association for Health, Physical Education, and Recreation.

8. Films
   Foot Health
   American Podiating Assn.
   20 Chevy Chase
   Washington, D. C. 20015

   Filmstrip The Wing Foot #1187 (13 1/2 min.) sound (same as above).

9. Filmstrip
   #27 Recreation-Listening Library Inc.
   1 Park Ave.
   Old Greenwich, Conn. 06870

10. Film
    The Fitness Challenge 1963 (28 min.)
    American Osteopathic Assoc.
    Order Dept.
    212 E. Ohio Street
    Chicago, Ill. 60611

11. Educators Index of Free Materials

Unit VIII - Concerning Your Vision and Hearing

Related Behavioral Objectives

1. The students will be able to describe the work of the optometrist or ophthamologist and educational requirements, and name some other jobs related to these professions.
2. The students will be able to identify some common seeing or hearing problems and be able to tell how these are tested.
3. The students will be able to describe what noise pollution is, its effect on society, and how this information is important to them.
4. Students will be able to describe organ donations and transplants and some of the persons involved in this work.

Procedure

1. Contact optometrist or ophthalmologist and arrange for him to talk with the class about his job and related professions.
2. Contact and make arrangements to have public health nurse speak on common seeing and hearing problems.
3. Secure seeing chart and information on how to test vision.
4. Explain whisper test.
5. Arrange class panel discussion on noise pollution.
6. Make arrangements for interview with member of local facility for organ donations.

Activities

1. Invite an optometrist or opthalmologist to talk about his work. Include job qualifications, educational requirements, advantages and disadvantages and perhaps other related professions.
2. Have public health nurse or school nurse talk about identification of common hearing and visual problems and general information about her job.
3. Put up an eye chart, have students test each other.
4. Have student try whisper test on several persons during the day and report results in class.
5. Have panel discussion about noise pollution in our society and related problems and what to do about problem.
6. Have student interview doctor on local facilities concerning organ donations and eye bank.
7. Have film relating to persons who do research on transplants of organs and the organ bank (donations) program.

Resources

1. Videotape of speakers and panels
2. Tape recorder
3. SRA - Seeing & Hearing Occupations
4. IFR
5. Forresters on Noise Pollution, Seeing and Hearing
6. Free Film Catalog
7. Educators Index of Free Material
8. HEW
9. Films
    Breaking Sound Barriers S-096 (28 1/2 min.)
    Association Films
    Careers in Speech & Hearing
    Lifeline of the World of Sound
    Beltone Electronics Corp.
    Modern Talking Pictures Service
    Miracle of Vision, 1968 (15 min.)
    American Optometric Association
    Glaucoma, 1965 (27 min.)
        National Society for Prevention of Blindness

Unit IX, X, XI - Preventing Misuse of Drugs, Alcohol, and Tobacco

Related Behavioral Objectives

1. Having heard the speaker from Al-Anon and seen the film on the perons who works in the area of drugs, the students should be able to explain the difference between Al-Anon and Alcoholics Anonymous (AA), their basic philosophy and the role they play in peoples' life.
2. The students should also be able to list some of the kinds of jobs available in these areas.
3. The students should also be able to explain the treatments for drug abuse as well as the different people involved in this work.
4. Organize and assign the role-playing. Have one student interview a person in AA or Al-Anon..
5. Contact a speaker from a Half-Way House.
6. Organize a panel discussion on the family related problems that result from the use of alcohol.
7. Having had the speaker from Half-Way House and had the panel on alcoholic problems as they relate to the family, the students should be able to describe the characteristics a person should possess to be able to do this type of work.
8. The students should also be able to explain the various ways a person who drinks may injure himself and others.

Procedure

1. Contact AA for speakers.
2. Secure film in the area of treatment of drugs or alcohol (AA) and be sure some information on the people who work there is included.

Activities

1. Speaker from Al-Anon who describes persons that work in that area and what they do.
2. Film on persons who work on prevention, treatment and rehabilitation related to alcohol and drugs
3. Role-playing of the kinds of personality one should possess to do this type of work. One person that goes to Al-Anon and one that goes to AA.
4. Have a speaker from a Halfway House.
5. In panel, discuss family-related problems from alcohol and the adjustment of the family.

Resources

1. AA
2. Al-Anon
3. Write AA for any films available
4. Occupational Literature
5. SRA
6. IFR
7. Educators Index to Free materials
8. Forrester's
9. Film
   The Drinking Game (27 min.)
   Association Film

Unit XII & XIII - Prevention and Control of Communicable Disease and Chronic Illness

Related Behavioral Objectives

1. Having heard the representatives of the Cancer Society, the students should be able to describe their work, the kinds of jobs available, the qualifications, the educational requirements, advantages and disadvantages of some of these jobs.

2. Having had a tour or seen the slides of public health facilities and discussed the local ones, the students should be able to list these, tell about the jobs available in these areas, and the functions these organizations perform for the public.

3. Having heard the person who does research tell about his job, the students should be able to tell about the work he does, his job qualifications, and training required.

4. Having had a United Appeal (U.A.) representative or film, the student should be able to tell about the various agencies we have studied and about their functions and about the jobs available in these areas.

5. Having studied the bulletin board material and discussed the jobs related to compiling and putting together this material, the students should be able to tell about these jobs.

Procedures

1. Contact Cancer Society and make arrangement for speakers.

2. Make arrangements to take a field trip to view and visit public health facilities or show slides of the facilities and discuss.

3. Contact Cancer Society or other private agency for researcher who can talk about their work and other jobs in this area.

4. Contact U.A. representatives. Secure a film or filmstrip in the area of united appeals.

5. Organize bulletin board committee to develop materials on the various areas we have studied.

Activities

1. Have a person from the Cancer Society discuss the volunteer health agencies, their work, the kinds of jobs available, qualifications, educational requirements, advantages and disadvantages.

2. Tour or slides of the public health facilities, guidance center, and Red Cross.

3. Film or research person to talk about his work (someone financed by a private health agency).

4. Have the U.A. representative talk about various agencies. Perhaps secure a filmstrip on that area which includes mention of some of the jobs in these areas.

5. Have a bulletin board on the many materials available related to the Cancer Society and other organizations, the various jobs involved in the preparation of this material.

Resources:

1. SRA
2. IFR
3. Forrester's
4. Cancer Society and T.B. Society
5. U.A.
6. Public health facilities
7. Contact public health department for films available in this area.
8. Educators Index to Free Materials
9. Films
    In Medical Laboratory (28 min.)
    National Committee for Careers in Medical Technology
    Cancer Society
    Careers in Bactoriology (20 min.)
    Becton Dickinson & Company
    Austin Center (30 min.)
    (Cerebral Palsied Children)
    United Cerebral Palsy Association, Inc.

    The Way Back 1964 (29 min.) (rehabilitation of spine injury)
    Rehabiliation Institute of Chicago

Additional resource material and free career information:
"Microbiology in Your Future"
(1 free) American Society for Microbiology

Unit XIV — Preventing and Eliminating Environmental Contamination
Unit XVII — Solving Future Health Opportunities

Related Behavioral Objectives

1. Having heard the speaker from the health department and discussed the various jobs, the students should be able to tell the functions and educational requirement and training required in these jobs.

2. Having heard a research person talk, the students should be able to list many research jobs available in the areas discussed and generally be able to tell about them.

3. Having seen the film on the X-ray technician, the students should be able to talk about this work and describe the related jobs as well as explain what radiology is.

4. Having heard the speaker, the students should be able to tell about Peace Corps and Vista and about the job opportunities available in these areas.

5. Having worked on bulletin board displays on the various areas studied, the students should better be able to tell about these areas.

Procedure

1. Make arrangements with health department to secure speaker.

2. Contact speaker in research.

3. Contact hospitals to find X-ray technician speaker.

4. Make arrangements for Peace Corps speaker.

5. Assign and organize committee to work on bulletin board display.

Activities

1. Have a speaker from the health department talk about job opportunities and the work of the sanitary engineer, public health sanitarian, industrial hygienist, environmental pollution control.

2. Have research person talk about research in the area of noise, environmental pollution, or pesticides.

3. Film or X-ray technician to talk about his job an other related jobs, opportunities, advancements, training, as well as explanation of radiology.

4. Speaker on Peace Corps opportunities in health areas, also Vista exposure and international relations.

5. Have committee work [illegible] ulletin board display on the various job areas studied in this unit.

Resources

1. Local health department and Ohio State Health Department.
2. Research scientist
3. Hospital for X-ray technician
4. Peace Corps
5. Forrester's Occupational Literature
6. IFR
7. SRA
8. Educators Index to FREE Materials
9. Filmstrip
   #16 Health Education Listening Library Inc.
   1 Park Ave.
   Old Greenwich, Conn. 06870
10. Film
    Light in Shadows: The Story of X-ray, 1968 (21 min.) Association Films Inc. about a radiologist
11. Free material - "You can be a Conservationalist" American Forestry Assoc.

Unit XV - Living Safely

Related Behavioral Objectives

1. Having heard the representative from AAA, the students should be able to name the safety programs for which the AAA is responsible as well as the various job opportunities in this type of work.

2. Having heard the safety engineer, the students should be able to describe the work, the qualifications and opportunities in this area as well as related areas.

3. Having heard the representative from the Red Cross, the students should be able to perform mouth to mouth resucitation on the "model" and name the variety of Red Cross work as well as job opportunities in these areas.

Procedure

1. Contact AAA.

2. Contact safety engineer.

3. Contact Red Cross.

4. Organize committee to compile this information and make bulletin board display on areas studied.

Activities

1. Have an AAA speaker talk about safety and jobs related to this, qualifications and opportunities.

2. Have a safety engineer from industry come in to talk about his job in industry, qualifications, and opportunities.

3. Have a representative from Red Cross give demonstration of mouth to mouth resuscitation and discuss other job responsibilities and opportunities in the area of Red Cross work.

Resources

1. SRA

2. IFR

3. Forrester's Guide

4. Ohio State Health Department

5. Safety Engineer

6. AAA

7. Educators Index to Free Materials

8. Red Cross

9. Films
    The Challenge of Six Billion (27 1/2 min.)
    Sterling Movies--food, water, energy, transportation problems.
    Championship Bicycle Safety (13 min.) RV-402 Assn. of Films
    Brown proofing, 1966 (20 min.)
    Job Corps/Community Relations
    Manpower Administration
    Family Fire Safety #2464 (13 min.)
    Sterling Movies
    Home Sweet Home 1962 (15 min.)
    Travelers Companies
    Call to Action, 1965 (14 1/2 min.)
    American Red Cross

Unit XVI - Selecting Medical Products
Unit XVII - Solving Future Health Problems

Related Behavioral Objectives

1. Having seen the public health services film, the student should be able to list and describe these, particularly as they relate to him now and in the future.

2. Having done the research work on the State Department of health and local departments, the students should be able to list the areas of work they are involved in and general types of material available through them.

3. Having heard a pharmacist or pharmacologist or film in this area, the students should be able to describe the kinds of quackery and what one should do concerning this matter.

4. Having heard the general practitioner, the students should be able to describe his work and know the qualifications and training available, the advantages and disadvantages of this work as well as this type of information as it relates to the paramedic field.

5. Having seen the films on medicare and health insurance, the students should be able to list some of the opportunities available in this area as well as be able to tell what medicare and health insurance are and the advantages and disadvantages.

Procedure

1. Secure a film on public health service.

2. Assign and organize committee to compile information on local and state department of health.

3. Contact a local pharmacist or pharmacologist.

4. Secure film on "quackery."

5. Arange for general practitioner to talk.

6. Contact insurance representative or representative of medicare.

7. Secure film on health insurance and/or medicare.

Activities

1. Show a film on public health services and facilities.

2. Committee report on listing and description of people that work in the health department. Also report on all materials available there and jobs related at all levels. Have them write to Ohio State Department of Health.

3. A pharmacist or pharmacologist speaks on "quacks and quacks' medicines." Also the opportunities in pharmacy and pharmacology, advantages, disadvantages, and educational and training requirements.

4. Show films on "quackery" in medicine and doctors.

5. A general practitioner talks about his work, advantages and disadvantages, and career opportunities and qualifications. Also about the paramedic field and its opportunities.

6. An insurance (health) representative talks about medicare and health insurance. Also job opportunities in related areas.

7. Show film on health insurance or medicare.

Resources

1. IFR

2. SRA

3. Educators Index to Free Materials

4. Forrester's Educational Guide

5. Educator's Guide to Free Film

6. Health departments, local, state, for film catalog

7. Local pharmacist and local pharmacologist

8. Local general practitioner

9. Films
   Air Evac (10 min.) Red Cross - 1969
   Healing Hands of Medicare (13 1/2 min.)
   Medicare 1967 (10 min.) Social Security Administration
   Time. . .and a Place to Grow, 1966 (26 min.) Association Films Inc.
   Day of Judgement, 1966 (24 min.) Lilly & Co.

10. Free Career Information
    Want to Make the World Better?
    National Easter Seal-Crippled Children and Adults
    2023 W. Ogden Avenue
    Chicago, Ill. 60612

APPENDIX

Supplementary Academic Materials (including audiovisual materials)

Item	Company
Exploring the World of Work (records)	Demco Educational Corp. Box 1488, Madison, Wisconsin 53701
A New Horizon: Careers in School - Food Service (filmstrip/record)	Guidance Associates Pleasantville, N.Y.
Preparing for Jobs of the 70's (filmstrip/records)	Guidance Associates Pleasantville, N.Y.
An Overview of Technical Education	Guidance Associates Pleasantville, N.Y.
#14 Food Production #16 Health Ed. #27 Recreation #33 Social Work #30 Scientific Research	Listening Library, Inc. 1 Park Avenue Old Greenwich, Conn. 06870
Health Technicians by Robert E. Kinsinger	J.G. Ferguson Publish. A subsidary of Doubleday & Co. Chicago, Ill.
Horizons Unlimited #3033	Modern Talking Pictures 2238 Euclid Ave. Cleveland, Ohio 44115
We Haven't Had that Yet (3470) 1960 14 min.	Modern Talking Pictures 2238 Euclid Avenue Cleveland, O. 44115
A Place to Get Well (20 min.)	Merck Sharp & Dohm Film Lib. West Point, Penn. 19486
School Health Today (filmstrip) 1951	National TB & Respiratory Disease Assoc. 1740 Broadway N.Y., N.Y. 10019
The Time of Growing 1965 (29 min.)	Metropolitan Life Insurance Madison Avenue N.Y., N.Y. 10010
A Storm, A Strife #3556 (28 min.)	Modern Talking Pictures
Take A Good Look (filmstrip 12 min.)	Association Film Inc. 512 Burlington Aven. LaGrange, Ill. 60525
Lab of the Body (27 min.)	Am. Dental Assoc. Bureau of Audio-visual Services 211 E. Chicago Ave. Chicago, Ill. 60611

APPENDIX

Supplementary Academic Materials (Continued)

Item	Company
Foot Health (filmstrip)	American Podiatry Assoc. 20 Chevy Chase Circle, Washington, D.C. 20015
The Wing Foot (13 1/2 min.)	American Podiatry Assoc. 20 Chevy Chase Circle, Washington, D.C. 20015
The Fitness Challenge	American Osteopathic Assoc., Order Dept. 212 E. Ohio St. Chicago, Ill. 60611
The Drinking Game (27 min.)	Association Films 512 Burlington Ave. LaGrange, Ill. 60575
Careers in Bacteriology (20 min.)	Becton Dickinson & Co. Att. Mr. Frank Selmser Rutherford, N.J. 07070
Austin Center (30 min.)	United Cerebral Palsy Assoc. 66 E. 34 St. N.Y., N.Y. 10016
The Way Back, 1964 (29 min.)	Rehabilitation Institute of Chicago Photography Dept. 401 E. Ohio St. Chicago, Ill. 60611
Light in the Shadows: The Story of X-rays 1968 (21 min.)	Association Film, Inc. 512 Burlington LaGrange, Ill. 60575
The Challenge of 6 Billion (27 1/2 min.)	Sterling Movies Book Dept. 43 W. 61st St. N.Y., N.Y. 10023
Call to Action (14 1/2 min.) 1965	American Red Cross Local Chapter
Air Evac (10 min.) 1969	American Red Cross Local Chapter
Healing Hands of Medico (13 1/2 min.)	Care Inc., Nat. Field Dir. 660 First Ave. N.Y., N.Y. 10016
Medicare, 1967 (10 min.)	Social Security Administration address from P.O. for district office
Time. . .and a Place to Grow 1966 (26 min.)	Association Films, Inc.
Day of Judgment (24 min.) 1966	

APPENDIX

Jobs Related to Health

- Teacher-related
  - Athletic coach
  - Physical education teacher
  - Driver instructor
  - High school health teacher
  - Speech therapist
  - Hearing therapist

- Recreation
  - Recreation director - industry
  - YMCA
  - YWCA
  - City parks

- Doctors
  - Radiologist
  - Anesthetist
  - Podiatrist
  - Pediatrician
  - General practitioner
  - Opthamologist
  - Optician
  - Psychologist
  - Osteopathic
  - Chiropractor
  - Dentist
    - Assistant
    - Dent. Lab Technician
  - Paramedic
  - Pharmacologist

- Hospitality
  - Restaurant Manager
  - Motel Manager
  - Hotel Manager

- Nutrition
  - Dietician
  - Food Chemist

- Medicine
  - Pharmacologist
  - Research Scientist

- Hospital
  - Orderly
  - Doctor
  - Pathologist
  - Bacteriologist
  - EKG technicians
  - Anesthetist
  - Radiologist
  - Head Nurse
  - Registered Nurse
  - Licensed Practical Nurse
  - Lab Assistant
  - Surgical Nurse
  - Intensive Care Nurse
  - O.R. Nurse
  - Technician Nurse
  - Scrub Nurse
  - Medical Assistant
  - Hospital Attendant
  - Record Department Chairman
  - Ward Secretary

AKRON

Home Economics

Developmental objectives for this unit were included in an administrative preface. This home economics program contains experiences in the cognitive and effective domains. The resources and listing of materials are good.

Home Economics

Home Economics is a career-oriented subject since nearly all activities can be related to the values and skills needed in the world of work. This guide may be used as a supplement which will assist the teacher in relating her subject to specified careers and in selecting activities from those listed. It is hoped that the teachers using the guide will make additional suggestions and evaluations to help us make improvements.

In the seventh grade, girls may be made aware of many different kinds of vocations related to the field of home economics. In the eighth grade more specific guidance should be given to the type of education needed in particular vocations.

In both grades, when time permits, the students can be encouraged to do some community work. This may involve a demonstration of what they have learned, or practice in skills by doing volunteer work.

The first portion of the suggested activities relates to activities that can be incorporated at any grade level of home economics classes, while the latter portion specifies activities for grades seven and eight.

Suggested Activities
for
All Home Economics Classes

Content	Concepts	Techniques
Why are the industrial arts and home economics subject areas referred to as "life skills?"	1. The life skills take into account all of the human senses.	1. Bring to class several types of fabrics and be prepared to discuss why you would use each for different purposes.
Definition: Life skills are the learnings necessary for the individual to interact with his environment.	2. Life skills are concerned with intelligent consumer choices.	2. Set up a display of several of the same product, each made from different materials (e.g., handbags made from leather, plastic, synthetics, string). Ask students why they would choose one handbag over another.
	3. Life skills provide unique experiences in the development of safety habits.	3. Construct a bulletin board showing safe and unsafe life skills procedures.
	4. Development of life skills is a sequential process.	4. Construct a flow chart showing steps involved in the simple tune-up of an automobile. Discuss sequential steps involved.
	5. Life skills contribute to employability.	5. Show picture to class showing men and women engaging in various occupations. Ask students to explain what they see.
		6. Set up a display table of various materials (e.g., tools, plastics, paints). Ask students how these materials are related to the world of work.
		7. Mimeograph and distribute some job descriptions. Discuss how students can prepare themselves for these jobs today.

Content	Concepts	Techniques
What is Work? Definition: Physical and/or mental expenditure of energy in the production of goods or service. Work involves the application of learned skills.	1. There are many types of work: The Dictionary of Occupational Titles (DOT) groups them as-- 0-1 Professional, technical, and managerial. 2 Clerical and sales 3 Service 4 Farming, fishing, forestry 5 Processing 6 Machine trades 7 Bench work 8 Structural work 9 Miscellaneous 2. Various types of work demand various levels of preparation. Work and job requirements are constantly in a state of flux. 3. Work results in societal stratification. 4. Each type of work contains its own inherent worth.	Organize role-playing with students to portray one occupation within each of the 0-9 groupings. Choose three varying occupations (e.g., nurse, clerical worker and welder). Show what specific vocational preparation is required for each (see DOT, appendix A, p. 652). Have each class member represent a different occupation. Each student then discusses what occupational group he would like to be associated with and why. Ask the school secretary to discuss her role in terms of contributing to the efficient school operation. Get an idea of different types of work by visiting local industries. Classroom discussion to follow regarding types of work seen.
Why do people work? People work to satisfy individual needs and wants.	1. People work to satisfy economic needs. a. basic needs b. wants beyond needs c. long-term individual and family planning. 2. People work to satisfy society's needs. a. improvement of society b. day-to-day operation of the economy c. providing of goods and services	1. Ask class to imagine that family breadwinner suddenly becomes unemployed. What effect would this have upon your family as a whole? Upon yourself as an individual? 2. Choose one occupational cluster (e.g., health services) and make a blackboard list of all occupations within that cluster. Have students do research into one of the specific occupations and explain its relevance to the entire cluster.

Content	Concepts	Techniques
	3. People work to satisfy psychological needs (enhancement of self-concept). a. spirit of adventure b. prestige, self-esteem	3. Ask parent involved in hazardous occupation (e.g., steeplejack, stock car driver) to speak to class on reasons why he chose this field.
	4. Needs influence occupational choices.	4. Ask student who works after school or during summer to speak to class about his reasons for working. Attempt to show that there are reasons other than economic for working. 5. Have class imagine a society in which no one worked. Discuss implications socially, economically, personally.
What are current attitudes toward work? a. by students b. by students' parents c. by employers d. by labor unions e. by various levels of government f. by schools.	1. Some of today's students feel traditional occupations are meaningless.	1. Present traditional and current (commune, "return to the earth") work concepts. Discussion of relative worth of each by class.
	2. Family influence in assisting students to choose an occupation is lessening.	
	3. Technological changes have brought about a minimizing of physical abilities and maximizing of mental processes and creative abilities. a. There is stress today in the world of work upon various aptitudes related to technological change: intelligence, verbal, spatial understandings. b. There is less stress upon physical demands such as lifting, pulling, carrying activities.	3. Visit a Data Processing Center to demonstrate concept #3.
	4. There has been a resurgence of craftsmanship in the American society within the last five years.	

Content	Concepts	Techniques
	5. Employers are looking for increased productivity in return for higher wages and more employee benefits.	5. Lecture by local management and labor union leader as to role of business and labor in life skills area (new trends in both management and labor, e.g., concept of accountability, cost-reduction procedures, increasing production).
	6. There is an increasing concern for ecological implications on the part of employer and employee.	
	7. Unions are becoming increasingly concerned about job security for their members.	
	8. There is much mobility within various occupational fields.	8. Secure resource speakers who have been mobile within their occupational fields.
	9. Economic factors are responsible for cutbacks in government jobs today. Job security in government jobs is becoming less prevelant.	
	10. Schools are becoming increasingly concerned about the dissemination of occupational information.	10. Ask school guidance counselor to speak with life skills classes regarding sources of occupational information in guidance office.
How can an early secondary student prepare himself today for the world of work through the life skills?	1. A student should be aware of the "self" in relation to the environment.	1. Have students fill out or make up a job application.
	2. Students whould be aware that education is an on-going life process.	2. Have college-bound high school students visit class to become aware of career opportunities available in the life skills.
	3. An awareness of life skills is essential for occupational success.	

Content	Concepts	Techniques
	4. A role in student government sometimes provides a background for sound occupation choice (e.g., acceptance of authority, sharing of responsibilities).	4. Observe a Student Government Association in action. Discussion of concepts observed (e.g., leadership roles, delegation of duties).
	5. Maintenance of sound physical and mental health is essential for participation in the world of work.	5. Have a nurse talk with life skills classes on health and safety considerations.
What are the educational opportunities available after junior high school in the life skills?	1. There are high school courses available in the further development of life skills	
a. high school b. college (4-year, 2-year, and certificate programs) c. continuing education d. on-the-job training e. apprenticeship f. drop-out programs g. in-plant training	2. There are available degree (2 years) and non-degree (1 year or less) programs in some colleges for pursuing post-high school education in life skills.	2. Ask an admissions representative from a university or agricultural and technical college to speak to life skills classes explaining these programs.
	3. Department of Labor and labor unions sponsor and administer varying apprenticeship programs	3. Ask member of Apprenticeship Board to speak to large groups of seventh, eighth and ninth graders.
	4. Job Corps opportunities are available for high school and junior high dropouts.	4. Ask a Job Corps counselor to speak with potential dropouts as identified by counselor in life skills classes.
	5. Interest activities can lead to occupational choices.	5. Show pictures of people involved in various leisure time activities. Discuss ways in which these activities can help in making occupational choice.

Content	Concepts	Techniques
		6. Have students relate DOT worker traits (training time, aptitudes, interests, temperaments, physical demands, and work conditions) to various levels of preparation for different occupations using qualifications profile.
How are occupations structured within the life skills area? DOT Occupational Group Arrangement: 0-1. Professional, technical, managerial 2. Clerical and sales 3. Service 4. Farming, fishing, forestry 5. Processing 6. Machine trades 7. Bench work 8. Structural 9. Miscellaneous Jobs are grouped according to a combination of work fields, purpose, material, product, subject matter, service, generic term and/or industry.	1. There are many levels of entry occupations within the life skills.	1. Ask representative from gas or electric corporation to speak to life skills classes regarding entry occupations in his company.
	2. Occupations are grouped into nine main categories (see content).	2. Mimeo nine occupational groupings individually on separate sheets of paper. Pass at random and have students identify jobs within individual grouping.
	3. The life skills are involved in all of the nine occupational categories.	3. List the nine occupational groupings on a blackboard. Ask students to chose an occupation within the life skills area and relate it to as many groupings as they can.
	4. The occupational groupings differ with regard to skills, education and training.	4. Have students choose an occupation within the life skills and construct a flow chart showing preparation for entry in regard to: a. skills b. education c. training
	5. The changine nature of occupations leads to a need for greater individual flexibility.	5. Have students role-play to depict reasons why a physicist is unemployed today.

Content	Concepts	Techniques
How is self-evaluation important to the development of life skills?	1. Knowledge of individual skills can indicate to students a potential work field.	1. Prepare self-evaluation sheets or progress charts in life skills classes so that students can evaluate themselves. Prepare a series of thought provoking interest statements to which students respond positively or negatively.
	2. Self-analysis regarding the following will assist in decision-making about occupational choices within the world of work: a. temperament b. aptitudes c. interests d. training time e. physical demands f. working conditions	2. Distribute DOT job descriptions of dietician and tool-and-die maker. Ask students if they feel they would be happy in these positions. At conclusion of work session or project in life skills class, ask students how they felt working within teacher-classroom guidelines. Compare these feelings with an actual job experience.
	3. The school experience contains many elements that are common to the work experience.	3. Assign students to various responsibilities necessary for the efficient operation of the life skills class. Relate class responsibilities to similar ones that would be present on the job. Invite students from high school life skills classes to speak about reasons for their choice and future goals. Have students interview local businessmen as to their reasons for entering their particular occupational field. Report to class and have students express preferences or dislikes for possibly entering the occupational area concerned.

Content	Concepts	Techniques
Why are interpersonal relationships significant in the classroom setting?	1. The life skills lend themselves to a spirit of cooperativeness and creativity in the classroom.	1. Use the foremanship system for cooperativeness in environmental maintenance (i.e., cleanup activities)
	2. Skills taught in the life skills area often carry over to the world of work.	2. Conduct a field trip to local industries to observe learned life skills in operation. A trip to a local dress factory. Have owner of local automotive business visit industrial arts classes to discuss job functions and skills of his mechanics. School dietician to home economics class.
	3. Interpersonal relationships developed in the life skills carry over to the world of work. a. pupil-pupil, worker-worker b. pupil-teacher, employee-employer c. pupil-student government d. student government-school, union-management	3. Have students role play using employee-employer concept. Have the players and the class discuss their feelings and any concepts gleaned from skit.
	4. Life skills occupations involve adjustment to varying temperaments e.g., situations involved with -- a. direction, control, and planning of an entire activity b. dealing with people in job duties beyond giving and receiving instruction c. influencing people in opinions, attitudes or judgments about ideas or things.	4. Visit to automotive or cosmetic plant to observe assembly-line procedures. Stress awareness of dependence of workers upon each other and upon their individual efforts. Have guidance counselor visit life skills classes to discuss importance of cooperation.

Content	Concepts	Techniques
What is the function of education for recreation in the life skills? a. needle-craft b. woodworking c. home-maintenance	1. Recreation is a significant of the American life style today.	1. Make a list of life-skill activities pursued during after school and after work hours, during vacation periods.
	2. Acquired knowledge of the use of tools is beneficial in the pursuit of hobbies or avocations for leisure or nonemployed time.	2. Make a collage using materials left-over from a project (see art teacher for ideas). Students discuss or demonstrate various hobbies.
	3. Vocational endeavors may be an out-growth of avocational pursuits. Leisure time pursuits may be more gratifying than work.	3. Invite a recreational activity college major to class to discuss recreation as an occupational field.

Home Economics
Grade 7

Brief Description of Aims

Unit I - Introduction to the Field of Home Economics

Unit II - Personal Grooming and Social Development

Topic: Introduction to the Field of Home Economics

Description: Expose students to wide field of careers in Home Economics

Careers: Discuss a few careers that might be covered during the course

- Interior Designer
- Homemaker
- Buyer
- Demonstrator
- Teacher
  - Nursery School
  - Junior and Senior High
  - College
  - Extension Service
  - Head Start teacher or Aide

Unit II

A. Good Grooming

- Model
  - High Fashion
  - Department Store
  - Catalog
- Charm Schools
  - Owner
  - Advertising
  - Teacher
- Hair Care
  - Beautician
  - Shampoo Girl
  - Receptionist
  - Hair Stylist
  - Wig Stylist
  - Barber
  - Teacher at Cosmetology School
  - Teacher at Vocational School
- Face Care
  - Dermatologist
  - Make-up Artist
    - On TV
    - Door-to-door sales
    - In stores
  - Plastic Surgeon

Activities

Speaker from a utility company
Home economist from a nearby college to tell girls some of the different college opportunities

Field trip to University of Akron see nursery school and home management house

Audiovisuals
Economics - An Exciting Career

Home and Careers
Role-play specific situations where good grooming is important in meeting the public.

Committee work to develop own values for good grooming. Make charts, reports, skits.

Audiovisual Aids
Charm by Choice
Does It Matter How I Look?
More Than Skin Deep
The World of a Girl
Tapes--Stewardess, Cosmetologist
Develop own set of audio-visuals

A. Good Grooming (Continued)

- Face Care
  - Exercise
    - Dance Instructor
    - Health Spa
  - Instructor
    - Teacher or Aide at YWCA
  - Airline Stewardess

Activities

Audiovisual Aids
- Speakers--
  - Beauticians from local beauty shop
  - Manicurist
  - Wig Stylist
  - Teacher at Charm School
  - Teacher from Dance Studio
  - Dermatologist
  - Door-to-door sales person

Field Trips--
- Health spa
- Large beauty shop
- Cosmetology class or have a student from a vocational class talk to the girls.
- Finishing school
- Television shows
  - Paige Palmer
  - Jack Lalane
  - Dinah's Place
  - Ann Thomas-Moore

Unit II

B. The Girl As A Person

Description: To learn the importance of cleanliness, good grooming, and health to success in the world of work.

Careers: All Careers

C. Personal Development

Description: See above

Careers: All Careers

Activities

Skit or role-play or discuss problems in personal relationships faced by people who meet the public in their careers

Audiovisuals
- The Real You
- The Road to Responsibility

Unit III

A. Machine Operation

Description: Study the different parts of the sewing machine and emphasize the correct usage and care of the machine.

Careers:

- Machine Repairmen
- Machine Demonstrator
- Machine Salesman
- Machine Technology
  - Advertising
  - Research for improvements and new machines.
  - Test new machines.

Activities

Speakers--

A sewing machine salesman to talk about sales techniques and their job

A sewing machine demonstrator

Representative from Singers.
Give a demonstration on care and usage of machine.

Home Economics
Grade 8

Topic: Nutrition

Description: Give the students an awareness of proper nutrition and develop discrimination in selection of foods. Stress meal planning.

Careers:

- Dietician
- Nutritionists
- Health Department Inspector
- Medical Careers
- Health Spa Workers
- Various restaurant and institutional kitchen and menu making careers
- Research
- Retail

Activities

Field trips to hospital kitchen, food processing plant, health spa, Coca-Cola Company

Tour of school cafeteria or worker to come in and tell the students about their jobs

---

Topic: Kitchen equipment and basic measurements

Description: Unit on correct usage and care of classroom equipment and importance of measuring correctly.

Careers:

- Houseware Sales
- Independent Sales
- Door-to-door sales
- Equipment demonstrator
  - Utility Company
  - Appliances
  - Department store
  - Demonstrate on TV shows
- Research
  - Test new equipment
  - Invent new equipment
- Communications
  - Radio & TV demonstrator

Activities

- Speaker from utility company
- Speaker emphasizing sales training
- Field trip or speaker from equipment manufacturer
- Field trip or speaker from lumber company
- Field trip to tile or linoleum company

Topic: Table Settings and Table Manners

Description: Unit on learning the proper care and arrangement of flatware and tableware.

Careers:

- Waitress
- Waiter
- Bus boy
- Cook
- Hostess
- Sales
  - Department sales

Activities

- Speakers from department stores
  - china consultant
  - sales clerk
  - linens department
- Speaker or field trip to a florist
- Students design & arrange centerpiece in the classroom for a special occasion

Careers:

- Creative Food Service
  - Food shops
  - Catering (home or commercial)
- Hotel Food service
- Advertising
- Florists
- Display artists

Activities

Audiovisuals

Filmstrips
- Dinnerware
- Pattern for Dining (stresses making of flatware)
- Care of house plants
- Arranging flowers
- On Making of Fine China (shows actual designing and making of china.)

Film
- The Prom - It's a Pleasure (shows florist, restaurant, and manners)

Topic: Using the Stove - Top of Range cookery

Description: Unit on preparing foods which are cooked on top of range.

Careers:

- Cook
  - Restaurants
  - Catering
  - Chef
- Cafeteria workers
  - grills
  - institutions
  - cafe
  - food purchaser
- Vending machine operator
- Airline
  - stewardess
  - food manager
  - dietician (plan meals)
  - food purchaser
- Soda fountain worker
  - short-order cook
- Bus boy/girl

Activities

Speaker from airline
Field trip to local restaurant (perhaps for lunch, girls could show how they should act in a restaurant)

Demonstration from gas company
Field trip to hotel-motel to show equipment, kitchen, quantity cookery
Visit to school cafeteria or food service department of board of education

Audiovisuals
- Film A Date for Dinner (shows actual running of a big restaurant)

Topic: Broiler

Description: Use and care of broiler section of the range, using both gas and electric.

Careers:

- Demonstrator--clubs and fairs
- Restaurant cook
  - grills
  - pizza shops

Activities

Girls do demonstration and other students evaluate them

Topic: Salads

Description: Study of different types of salads.

Careers:

- Salad girl
  - waitress
  - short order cook
- Cook
  - salad bar
  - worker

Activities

Filmstrip Song of the Salad
Field trip to a local restaurant to see how they make their salads

---

Topic: Snacks and Open Face Sandwiches

Description: Study of snacks.

Careers:

- Short-order cook
  - Worker and manager in specialty restaurant
  - Franchising
  - Order takers

Activities

Field trip to McDonald's and discuss different types of jobs

Have someone who is franchised in a business talk to the class

---

Topic: Canning and Freezing

Description: Learn the principles of canning and freezing.

Careers:

- Quantity cooking jobs
  - Institutions
  - Restaurants
  - Hospitals
  - Camps
  - Catering
    - Independent
    - Locally
  - Worker in Canning Industry
  - Labeling Careers
    - Research
    - Retailing
    - Improving

Activities

Field trip to any large institution to see how they work

Akron Univ. has a quantity cooking class - see their equipment and see them at work

---

Topic: Foreign Cooking

Description: Learn other types of cooking besides our own. Also learning other types of meal service.

Careers:

- Careers in restaurants

Activities

Field trip to a foreign cooking restaurant.
Films
  Pleasures of Chinese Cooking
  Far East in Your Kitchen
Have foreign meals in class
Discuss foreign foods and other countries in class

Topic: Purchase and Care of Kitchen Equipment

Description: Help the students develop guidelines for the purchasing of kitchen equipment. Also re-inforce the ideas of care and safety of kitchen equipment.

Careers:

- Salesmen and demonstrators
- Sales representative for equipment
- Cabinet maker
- Research in new products
- Testing new products

Activities

- Filmstrip
  - Purchasing of Dinnerware and Tableware
- Field trip to a lumber company that makes cabinets
- Have students plan a model kitchen

Topic: Home Nursing

Description: Emphasis on safety in the Home.

Careers:

- Medical Careers
  - Doctors
  - Nurses
  - Aides
  - Orderlies

Activities

- Speakers from different medical careers
- Field trips to one of the local hospitals to see all the careers in action.
- Films and class discussions

DAYTON

Meeting Needs of a Family (Health) Home Economics

This unit suggests some very appropriate and meaningful learning experiences in the affective domain.

Dayton

Home Economics

Meeting Needs of Family Members in Mature Manner

Objective:

To give student some frame of reference regarding mature actions in a family situation versus immature actions.

Relate maturity to success and happiness in any career.

Rationale:

Maturity is a lifelong process and early understanding of some of the problems involved might be most beneficial.

The child needs to comprehend the real meaning of the word "family" and how important this relationship can be to his development both now and in adulthood.

Initial Experience:

1. Read "Home" by Edgar A. Guest and consider why home and family are important. List other reasons besides those in poem which make these early experiences dear to student.
2. Students cite TV shows or any magazine or newspaper articles that are family-centered. Discuss.

Developmental Experience:

1. Role-play some situations such as:
   a. Using another's belongings at home, school or job without permission.
   b. Privileges allowed one group of people and not another. React.
   c. Sharing rooms, clothes, supplies at home or later in life in a career.
2. Analyze "How Mature Am I."
3. Dramatize a family council on problems such as
   a. How to spend a week of vacation
   b. Use of car or TV.

Culminating Experiences:

Students pretend they are parents or any adult. React to situations which you might encounter in school, at home, or on a job in a mature manner (each student might prepare one or two problems for discussion).

Enriching Experiences:

1. Have a "Swap Session" composed of individuals of various ages to discuss some difficult situations.
2. If a good leader is available, a "Circle Meeting" will prove beneficial.
3. The book I'm OK You're OK by Harris, will give some new insight into problems we encounter today.

DAYTON

Industrial Arts

Internal Combustion Engines, Uses and Small Engines

This unit contains a variety of psychomotor activities. With some creativity, the teacher could extend suggested activities and thoroughly integrate the industrial arts curriculum and careers.

Internal Combustion Engines, Uses and Small Engines

GRADE 7

Six Weeks

Objective:

1. Given a one-cylinder engine, the pupil will disassemble, reassemble, make minor adjustments to the carburetor and spark plug, and perform routine maintenance tasks.
2. Given a shop manual, the pupil will identify specifications and procedures for servicing a small gas engine.
3. Given a gas engine, a field trip, films, and printed information, the pupil will identify jobs and careers related to the internal combustion engine.

Rationale:

Today, practically everyone depends on the internal combustion engine. There are many types in everyday use, such as the liquid rocket, the solid rocket, the turbojet, the turbofan, the turboshaft, the wankel and the reciprocating using various cycles, such as the two-cycle and four-cycle. Many jobs and careers are available to persons in manufacturing and servicing gasoline engines.

Initial Experiences:

1. Have students prepare display boards showing pictures of various vehicles using an internal combustion engine.
2. Have students make diagrams of the basic engine cycles.
3. Have pupils prepare a list of occupations where skill in working on internal combustion engines is needed.
4. Have pupils in science analyze the chemistry of fuel combustion.
5. Visit a car agency and see mechanics in action.
6. Make a three-view drawing of a motor vehicle.

Developmental Experience:

1. Have students disassemble and measure a small gasoline engine, such as is used in a power lawn mower.
2. Use these measurements in math class to determine the C.I.D. (cubic inch displacement) and compression ratio of the engine.

3. Reassemble the engine.

4. Read and follow operating instructions, including servicing, starting, and running the engine.

5. Identify operating safety rules.

6. Use the shop manual in language arts to develop interest in reading and identify reading skills needed to read the shop manual.

7. Have pupils in math class take the measurements of the single cylinder Tecumseh. (This would be a teacher-prepared list of dimensions. The teacher would ask the pupils to measure in class with the engine in the center of the room.)

Culminating Experience:

1. Show films.
2. Allow the students to start and run the engine.
3. Design a safety poster in art showing safety considerations for operating rotating blade power mower.
4. Design a vehicle using a one-cylinder engine.

Enriching Experiences:

1. Name additional uses for internal combustion engines.
2. Have student make a report on internal combustion engine fuels.
3. The internal combustion engine as it relates to pollution.
4. List careers relating to or depending on the internal combustion engine.
5. Interview a mechanic.
6. Have a model car design contest.

Evaluation:

1. Name three uses for internal combustion engine.
2. Name three safety rules for operating a gas engine.
3. Start and stop a small engine.
4. List 10 occupations involving mechanic's skills.

Resources:

1. A small gas engine
2. Small hand tools
3. Charts from Briggs & Stratton Company, Milwaukee, Wisconsin
4. Manufacturer's manuals for small engines
5. Films. (Many food films available from various sources, such as General Motors, Volkswagen dealers)
6. Read "Trouble-Shooting" inside back cover of "Power Mechanics" by Bohn-McDonald, McKnight & McKnight, Bloomington, Illinois, 1970

MANSFIELD

These units clearly demonstrate how the seven developmental areas can be included in all academic areas.

Seven Areas of Concern

All programs in the Ohio Career Continuum are developed around seven basic areas: self, the individual and the environment, economics, world of work, education and training, employability and work adjustment skills, and vocational decision-making.

These seven areas must be developed in each phase of the program, in varying degrees, depending upon the comprehension and experience of the student. A brief description of these personal developmental areas follows:

Self

The student will be involved with understanding his interests, aptitudes, achievements, temperament, his relationships with his family and peers, his society.

The Individual and the Environment

The student must determine who he is and how he relates to his environment. He must be involved in experiences which will help him determine his relative abilities to work with people, to manipulate tools, to sense his presence in his environment, and to comprehend laws of nature, and the processes for behavioral advancements within his community.

Economics

The student must learn to see himself as a productive worker who supports his community through efficient positive efforts as a producer and as a consumer. He must learn that the money he receives for his work is an important factor in determing the behavior of his community through the way in which he spends his money; the way in which he is willing to work for his money; and how this spending gives direction to the use of raw materials for production and consumption of goods and services to be used in his community.

The student must learn what is meant by a "fair day's pay for a fair day's work" and the implied obligations between the consumers and the producers.

World of Work

This area is concerned with the student's development of a method for collecting information about jobs. It is also concerned with the student developing an understanding of what behavior is required to do certain jobs.

Examples of job information include, in part, the following:

Job entry levels
Performance activities
Working conditions
Education and training requirements
Availability of jobs
Seasonality of jobs
Job status
Advancement possibilities

Education and Training

The student must learn what behavior modifications (education and training) will be expected of him for certain jobs. In doing so he will learn the innate abilities he has and if these abilities can be developed to the level required to perform certain jobs he chooses for his vocation.

Students must learn which educational programs will help them to acquire the experience to develop the performance behavior required for certain jobs.

Employability and Work Adjustment Skills

This area is concerned with attitude strategies and the importance of the development of successful attitude strategies which are necessary for continued economic gains.

Students must learn how good attitudes are a contribution to their own adjustment and success as well as the success of their community. People are dismissed from their jobs more often becase they cannot get along with people than they are because they do not have the skills for their jobs.

Vocational Decision-Making

Students must learn a method for making decisions if they are to become employable and well-adjusted citizens. They must learn to gather facts about themselves, jobs, and values and how to weigh this information to reach a conclusion as to what work they are able to do and what work they want to do.

The Individual and His Environments

Environments and Work
Music 8

Developmental Objective

To develop an appreciation of interactions within the work environment.

Behavioral Objective

1. The student will be able to identify the occupations involved in producing and distributing a hit record.
2. The student will be able to portray the complexity of the recording industry.
3. The student will be able to explain the interrelatedness of various occupations within the recording industry.

Materials

Hit recordings
Record player
Poster paper
Clippings from magazines or newspapers

Procedure

1. Ask students to bring favorite recordings to class.
2. Discuss how recordings are produced. Have students list the jobs involved in producing and distributing a record. The teacher may need to guide the discussion to be sure all phases of production and distribution are included (composer, lyricist, arranger, conductor, instrumentalists, vocalists, studio engineers and managers, agents for artists, promoters, publicists, advertising copywriters, secretaries, music librarians, jacket designers, distributors, music store proprietors, disc jockeys, manufacturers, marketers, advertisers, etc.). Several students might be appointed to do some library research to find occupations to add to the list.
3. Have students bring in pictures from newspapers and magazines to illustrate the various occupations in the recording industry. These could be made into collages. A committee could be appointed to make a chart showing the complexity of the industry. A circle in the center of a large sheet of poster paper would be labeled "Hit Records." Lines would be drawn to other circles labeled with the occupations involved.
4. Ask students to speculate about what would happen if some persons involved did not get along with each other, did not show up for work, or did not perform their duties satisfactorily. Help them to arrive at a generalization about the interdependence of all occupations in the industry.

The Individual and His Environments

Environments and Work
Social Studies 8

Developmental Objective

To develop an appreciation of the interactions of all environments.

Behavioral Objectives

1. Given the filmstrip and record The Beginnings of American Industry, the student will be able to describe the effects of five inventions, developments, or discoveries on the various environments (home, school, community, society, and world).

2. Given the same filmstrip and record, the student will be able to point out favorable and unfavorable interactions in the environments resulting from the development of industry in the United States.

Materials

SVE filmstrip and record The Beginnings of American Industry (1769-1850)
Projector and record player
Screen

Procedure

1. Review with the class the various environments in which people live and work (home, school, community, society, world).

2. Ask the students to keep these environments in mind as they view the filmstrip and listen to the narration and look for ways in which the environments are affected by the inventions, developments, and discoveries that are described. They should be able to think of some effects in addition to those pointed out in the narration. Also ask that they consider which of the effects are favorable and which unfavorable.

3. Show the filmstrip and play the accompanying record. (A reading script is available and could be used instead of the record if the teacher would prefer to stop for discussion while showing the filmstrip.)

4. Discuss the questions raised in #2 above. Divide the class into small groups and assign each group two of the following topics for discussion and have them report their conclusions to the class: steam engine, electricity, spinning machines, cotton gin, interchangeable parts, canals, locomotive, reaper, telegraph, vulcanized rubber.

The Individual and His Environments

The Individual and Work
Art 8

Developmental Objective

To develop an appreciation that work is a way of fulfilling environmental wants.

Behavioral Objectives

1. Given a list of environmental wants, the student will be able to indicate several ways in which environmental wants can be fulfilled through work in the field of art.

2. Given a filmstrip, the student will be able to list ways in which the work of a designer fulfills environmental wants.

3. Given an assignment, the student will perform the tasks involved in fulfilling an environmental want.

Materials

Filmstrip and record People Who Create Art: Designer
Projector
Record player

Procedure

1. Hold a class discussion on environmental wants--beauty, recreation, comforts, and space.

2. Ask the students to suggest ways in which workers in art-related occupations fulfill these wants for themselves and others.

3. Show the filmstrip People Who Create Art: Designer and play the accompanying record.

4. Discuss ways in which this designer and others fulfill environmental wants. Students might take a walking tour of part of the community and try to pick out things that have been designed to fit a particular space in a way that is both pleasing to the eye and practical.

5. Have the students, working individually or in small groups, design something which will fulfill an environmental want. Some suggestions are listed below.

Summary of Filmstrip Content

Nelson Van Judeh, a California designer, discusses his work. He emphasizes the problem-solving aspect of designing. Examples of Mr. Van Judeh's work are shown--jewelry, a sign, a building.

Most of the filmstrip is concerned with his design of a playground, from concept through sketch and model to execution.

Suggested for Designs Assignment (Adapted from filmstrip guide)

1. A playground for an elementary school with which the students are familiar. They should consider the terrain, the amount of space, the ages, needs, and wants of the children who will use the playground, and available materials.

2. A "dream" home, developing the design in terms of how it will be used-- as a permanent home, summer retreat, ski lodge. Or, a design of a room with a special use in mind-- reading, writing, sleeping, playing, working on hobbies.

3. A room or house for a client from the following list: a rock musician, a little old lady with cats, an active teenager, a professional ball player, an artist or draftsman who works at home, or a "client" of the student's own choosing.

4. A single piece of furniture that includes: a place to sleep; a place to study, play, or read; storage space. It could be designed for a baby, a small child, an older child, or an adult.

5. A toy with which a small child could learn a skill. A student choosing this assignment might consult with the mother of a small child to find out what skill the child is ready for.

The Individual and His Environments

The Individual and Work

English 8

Developmental Objective

To develop an awareness that through work people meet their needs.

Behavioral Objective

1. Given the filmstrip and record Why Work at All? the student will be able to list four values of work in relation to individual personality development.
2. Given a discussion of the values people attach to work, the student will be able to relate these values to his own wants and needs.

Materials

Filmstrip and record Why Work at All?
Projector
Record Player
Screen

Procedure

1. As an introduction, ask students to list what needs are satisfied by work.
2. Show filmstrip and play accompanying record.
3. Have students compare their lists of needs satisfied by work with those given by people in the filmstrip.
4. Use the questions below as a basis for discussion.
5. Ask students to list three things they want most in life. Discuss the role of work in these preferences.

Questions for Discussion

Discussion Guide for Job Attitudes: Why Work at All?, p. 9-10

Summary of Filmstrip Content

Three students discuss with a counselor what work should and does mean to people. The students consider their own parents' attitudes toward their jobs.

Among the opinions expressed are these: Money is necessary for independence. Work should be something you enjoy. Work is a way to use up creative energy. Satisfaction is a major reward of work. Work can be outlet for aggresive or hostile drives. Sometimes one needs to invest present time or energy for future benefit.

The Individual and His Environments

Why People Work
Science 7

Developmental Objectives

To develop an awareness that work is man's way of creating, preserving, changing, or rebuilding his environments.

Behavioral Objectives

1. Given one week to pursue a list of suggested activities, the student will be able to identify at least three environmental problems and describe how these affect him and his environments (family, school, community, society, world).

2. Given an opportunity for research, the student will be able to name and describe a number of occupations that have changed, or have been created recently to deal with at least one environmental problem.

Materials

Magazines
Newspapers
Poster Paper
Camera, Film
Research Books on Environment
Career Briefs

Procedure

1. Assign activities to help students identify environmental problems. Some suggestions are listed below.

2. In class discuss the problems identified by students and ask them to speculate on occupations needed to deal with these problems.

3. Arrange for students to use library facilities or materials from career education office to investigate jobs in the field of environmental science.

Suggested Activities

1. Have students make posters or collages, illustrating environmental crises. They could use magazine pictures, newspaper headlines, and articles or draw their own illustrations.

2. Some students might take pictures to illustrate local environmental problems.

3. Arrange a tour of the city to observe pollution of various types.

4. Students could interview persons in local industries to find what is being done to curb pollution and what jobs are included.

5. Invite a local official to speak to the class about environmental problems. (Arrangements can be made through the career education office.)

6. A committee of students could arrange a display to illustrate environmental problems. For example, they might include a bottle of polluted water, a bag of litter, an article of clothing that had hung outside for several days.

7. Students could make a graph comparing the cost of some scarce commodity over a period of time (for example, electricity, natural gas, oil, gasoline).

Self

Art 7

Developmental Objective

To develop an acceptance of one's current achievement and potential.

Behavioral Objectives

1. Given a list of achievements in the field of art, the student will be able to assess his potential in this field.
2. Given an assignment, the student will complete an art project.
3. Given an evaluation, the student will be able to tell the possible reasons for the evaluation received.

Procedure

1. Give the students a list of tasks for which artistic ability is required. The list should involve tasks of varying difficulty.
2. Ask the students to indicate which of the tasks they think they could achieve at the present level of their ability and which they think they would be capable of doing with further instruction and practice.
3. Discuss with the class the fact that people do have different abilities, that not everyone does have artistic ability. Also, bring out the idea that people sometimes feel they do not have ability to do certain things simply because they have not tried to do them or have not been taught how to do them. Point out that people can lead more satisfying lives if they know and accept their strengths and weaknesses.
4. Assign a project which can be completed in a comparatively short period of time so that evaluation can follow quickly. Preferably students would be given a choice of tasks so that they could choose one which they feel is on their present level of achievement.
5. Evaluate the students' work.
6. Ask each student to write a short paragraph telling why he thinks he received this evaluation.

Self

Clothing
Home Economics 8

Developmental Objective

To accept one's own interests and values as uniquely his own and changing.

Behavioral Objectives

1. Given a list of items, the student will be able to visualize herself (and others) in relation to the items.

2. Given a class discussion, the student will be able to state how clothing is an expression of one's self.

Materials

Duplicated copies of list

Procedure

1. Give each student a copy of the list below and ask her to visualize herself in terms of each item. (For example, color - red.) If the teacher feels the members of the class are mature enough, they could work in pairs or small groups and give impressions of the others in the group, as well as of themselves. They should do this without discussion.

2. Discuss the students' impressions of themselves and others. How does clothing reflect one's interests? One's values? Ask students if they consider themselves conformists or non-conformists in their style of dress?

3. Ask the students how their impressions would have differed several years ago. Also, how might they change several years from now? What might influence these changes? If one changes one's style of dress to please a friend, parent, teacher, or employer, is one still expressing one's own interests and values?

4. As a follow-up, students might create a "Me Box," covering a box with photos, original drawings, pictures cut from magazines, and slogans which represent their style of dress.

List of Items for Personal Impressions

1. A color
2. An article of clothing
3. A type of jacket
4. A type of coat
5. A head covering
6. A kind of shoes
7. A kind of purse
8. A kind of fabric
9. Design of fabric
10. Gloves

Self

Music 7

Developmental Objective

To accept one's interest patterns as uniquely one's own and developing.

Behavioral Objectives

1. Given a questionnaire, the student will consider his interests and work habits.
2. Given a filmstrip, the student compares and contrasts the work patterns of a musician with that of someone in another occupation.
3. Given the work pattern and interests of a musician, the student compares and contrasts them to his own interests and work habits.

Materials

Filmstrip and record People Who Create Art: Musician
Projector
Record player
Duplicated copies of questionnaire, "Thinking About What You Are Like"

Procedure

1. Have students complete questionnaire, "Thinking About What You Are Like."
2. Show the filmstrip People Who Create Art: Musician and play the accompanying record.
3. Ask the students to list the characteristics of the musician's work pattern. These could be suggested in a class discussion and listed on the chalkboard. Or, students could work individually or in small groups. Opposite each characteristic of the musician's work, have students list a characteristic of another job with which they are familiar. Below is a suggested comparison from the filmstrip guide.
4. Have the student refer to his responses to the questionnaire and decide if his own interests and work habits compare or contrast with those of the musician and/or the worker in the other occupation.

Summary of Filmstrip Content

Daniel Lieberstein shows how music he composed relates to the filmstrip for which it was composed. He discusses how he learned to play drums. He mentions his father's fear of the musician's lifestyle but states that he leads a fairly normal life except for late hours.

Daniel tells the various ways in which he makes a living - playing in a band, teaching, composing. He points out the satisfactions as well as the drudgery of a musician's job.

Comparison of Work Patterns

Musician	Factory Worker
works irregular schedule	keeps regular hours (except for overtime)
often works alone	works with others as part of team or crew
has unpredictable earnings	can count on regular paycheck
is totally committed to his work	usually makes separation between job and outside life
must motivate himself	works for a boss
must look for work over and over again	can usually stay at the same job
often achieves nothing worthwhile after hours of working	does a certain amount of work every day
has no built-in assurance of success as eventual result of hard work	can look forward to promotion and regular advancement
may have to travel to find work	can usually work at one location

Self
Social Studies
Industry Unit

Developmental Objective

To develop one's values in regard to work and environment.

Behavioral Objectives

1. The student will describe his feelings about work in a factory.
2. Given a list of job qualities, the student will rank them in relation to his own values.
3. Given case studies, the student will compare his own values to those of the subjects.

Materials

Scholastic Search, Vol. 1, No. 9, November 13, 1972
Magazine and newspaper pictures of men and women working on assembly lines.

Note: This lesson is based on the contents of the November 13, 1972 issue of Scholastic Search.

"You and the Factory," p. 3

1. Ask students to look at pictures of men and women working on assembly lines. In addition to the pictures in Search, the teacher may want to post others on the bulletin board. Perhaps a committee of students could prepare a bulletin board display. They might make cards with some words from the list below followed by question marks and use them as part of the display.
2. From the following list of words, have students list those which describe their own feelings about the pictures. The teacher and students may think of additions to the list.

fun
uncomfortable
producing
surrounded
stifled
alone
useless
earning money
useful
helping people
angry
inhuman
strong
happy
hard work
necessary
dull
sad
bored
tired
noisy
important
grown-up
trapped
busy
calm
nervous
restless
crowded
tiny

3. Discuss with the students why they chose the words they listed.
4. Ask each student to decide, judging from the words on his list, whether or not he would like working in a factory.

"The Blue Collar Trap," p. 4-11, p. 16

1. Ask the students to list in order of importance, the following job qualities:

   high pay
   easy work
   interesting work
   fellow workers fun to work with
   jobs help people
   good chance to move up

2. Through class discussion, have the students compare the values they place on the above qualities with those of their classmates.

3. Ask the students to consider, as they read the script of the NBC-TV show "The Blue Collar Trap," why the four workers are unhappy even though they got very good pay. Also, ask the students to decide whether they agree with the workers' attitudes and why or why not.

   a. Ed works at Ford, putting tires on cars. His father is an electrician at Ford. Ed's values conflict with those of his parents. Money and the material things it will buy are important to them. Ed values his freedom. He is saving money to buy land in the Canadian wilderness, but does not quit his job because he needs it to survive. Hence, his own values are in conflict.

      Students are asked to speculate on whether Ed will quit his job soon or will stay at Ford like his father. They are also to indicate why they would rather live in Ed's house (posters on the wall, loud music) or his parents' house (new furniture, no posters).

   b. Willis, who wanted to be a lawyer but dropped out of college, counts and stacks cars on a big machine at Ford. He relieves his frustrations by dropping cars, banging doors, and staying home from work.

      Students are to give reasons why Willis should quit his job and become a lawyer or stay at his job and stop complaining. They are also to tell if they think he should be fired for staying home so much and for messing around on the job, or if he should stay home as much as he can and do whatever he wants to at work.

   c. Joe is bored with his job of wrapping windshields with rubber and lining them up. He would like to be a salesman. Diane, his wife, also works. She controls their finances. His unhappiness with his job is affecting his home life. Joe has trouble with his foreman and has no close friends at work, because he thinks everyone is out for himself. He, too, misses a lot of work. In fact, he says he is "fed up" with almost everything.

      Students are to tell why they think Diane should let Joe control the paychecks or keep control of the money and not give Joe more when he spends too much. They also are asked to consider Joe's desire to be a salesman in light of the fact that he has no close friends at work. The teacher might also want to bring out other factors such as his not wanting a foreman's job and his expressed desire to have a chance to advance and a good salary without breaking his neck ten hours a day.

   d. Gary drives cars off the assembly line at Ford and doesn't bother to report defects. He would like to get away from people and live close to nature. He and Linda, his wife, agree they don't want to bring children into a messed-up world. Both seem to want to become more than they are.

      Students will discuss Gary's and Linda's attitudes toward having children and Linda's statement, "There is more to all of us than what we appear to be."

4. To summarize the lesson, the students could be asked to reconsider the questions raised in # 3 under "The Blue-Collar Trap." They might also be asked if their feelings about factory work have changed after reading the TV script.

Education and Training
Mathematics 8

Developmental Objective

To develop an appreciation of the relationship between education and training and the world of work.

Behavioral Objectives

1. Given an assignment, the student can relate the application of mathematical skills to a variety of careers.
2. Given materials for research, the student will determine the level of education and/or training required for a minimum of five occupations in which skill in mathematics is essential.
3. Given descriptions of high school math courses, the student will plan a program for a career in which he is interested.

Materials

Career briefs and Occupational Outlook Handbook.
"Curriculum Guide," Mansfield City Schools
Duplicated copies of chart, interview form, and list of occupations.

Procedure

1. Have students discover how mathematics is used in a variety of careers in one or more of the following ways:
   a. Interview employed persons (neighbors, teachers, parents, others).
   b. Listen to and ask questions of resource persons. Perform or attempt to perform sample tasks prepared by resource persons. These would represent "real-life" situations in occupations demanding mathematical competence. They could include simple bookkeeping, production scheduling, shipping schedules and rates, payroll computation, market analysis, cost accounting. (Arrangements can be made through the career education office to secure resource persons whose jobs require varying levels of skills, education, and/or training in math.)
   c. Read career briefs. Note: The teacher will want to bring out the need for mathematical skills in any line of work to keep personal financial records, figure income tax, check statements, etc.
2. Give students a list of occupations from which they are to choose at least five to research. Using career briefs and/or the Occupational Outlook Handbook, they will complete a chart similar to the one included with this lesson. A list of suggested occupations is also included in the lesson. The teacher and/or students may want to add others. Encourage students to choose occupations requiring different levels of education and training.
3. Secure copies of the curriculum guide for the Mansfield City Schools and have each student decide which math courses he should take to prepare for a career in which he is interested. Invite a school counselor to explain the math courses.

Occupations for Research

accountant
actuary
architect
astronomer
auto mechanic
baker
bartender
carpenter
cashier
computer programmer
contractor
cook
doctor
electrician
farmer
housekeeper
insurance underwriter
mathematician
meter reader

navigator
nurse
optometrist
pharmacist
photographer
pilot
plumber
routeman
sales person
seamstress
secretary
statistician
service station attendant
surveyor
teacher
ticket agent
tool and die maker
waiter, waitress

Math in the World of Work
Interview Form

1. For what company do you work?
2. What is the title of your job?
3. What tasks does your job involve?
4. To what extent is mathematical skill needed in your job?
5. What high school math courses would be helpful in performing your tasks?
6. Is training in math beyond high school necessary in your job? If so, where can one receive such training (college, tech school, etc.)?
7. Can a person performing your tasks be trained on the job? Does the job require an apprenticeship?
8. How do you use math in your everyday life?

	Education and/or Training			
Occupations	College Graduate Degree or first professional degree	College Bachelor's Degree	Technical School or Apprenticeship	High School Diploma

Employability and Work Adjustment
Shop 8

Developmental Objective

To develop an appreciation of skills in interpersonal relationships which are important in work settings.

Behavioral Objectives

1. Given the filmstrip and record Hazing, the student will identify the problem from the viewpoint of each person involved in the conflict.

2. Given an assignment, the student will suggest possible ways of handling the problem presented in the filmstrip.

3. Given an assignment, the student will prepare a script to illustrate a problem in an interpersonal relationship.

Materials

Guidance Associate Filmstrip and record Hazing
Projector
Screen
Record Player

Procedure

1. Show the filmstrip Hazing (from the series on Job Attitudes: Trouble at Work) and play the accompanying records.

2. Use the questions below as a basis for discussion.

3. Divide the class into small groups. Ask some of the groups to decide how the problem between Nick and Bill could have been handled differently. They might role-play, beginning at an early point in the episode. Other groups could begin at the point where the filmstrip ends and decide how to handle the situation from there.

4. Ask persons from industry to tell about problems they have encountered involving interpersonal relationships and how they handled these problems. (Arrangements for resource persons can be made through the career education office.)

5. Have the students, working individually or in small groups, prepare scripts illustrating a problem in interpersonal relationships which might arise in school, at home, or on the job.

Summary of Filmstrip Content

Nick is working in a truck repair shop. He views this experience as a step in becoming a master mechanic. However, he is being asked to do things which he feels are not helping him reach this goal.

Bill, the older mechanic, sees Nick as a young kid expecting to be handed on a silver platter what he worked hard to attain. He thinks a new man on the job should expect to run errands, do the dirty work, and learn only jobs he is asked to, even if he doesn't understand why.

Questions for Discussion*

1. Does Nick have a legitimate complaint? Why or why not?
2. This kind of hazing of new employees is fairly common. What do you think might be the reasons for it? Have you encountered a similar problem in school, at home, or on a job?
3. Do you think a new man on the job should expect this kind of treatment? Why or why not?
4. How does Bill justify the things he asks Nick to do? In what ways do you think he is fair? Unfair?
5. Why do you think Bill has trouble understanding today's young people?

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*Adapted from Discussion Guide for Job Attitudes: Trouble at Work, p. 12-13.

Vocational Decision-Making
English 7

Developmental Objective

To develop an awareness that a person's gender may influence his vocational choice, but that changes in stereotypes are occurring.

Behavioral Objectives

1. Given a survey, the student identifies his own attitudes toward male and female roles.
2. Given class discussions, the student compares his attitudes with those of his peers.
3. Given filmstrips and records, the student examines his own attitudes in relation to the changes in attitudes toward roles of men and women.

Material

Mimeographed copies of survey
Filmstrips and records Jobs and Gender
Projector
Record Player
Screen

Procedure

1. Have students fill out the Career Education Survey, related to male-female roles. (A copy follows this lesson.)
2. Appoint a committee to tabulate the results of the survey.
3. Discuss the class results and ask students to compare their own responses with the consensus of the class. Allow students to express their individual opinions about various parts of the survey.
4. Show Parts I and II of Jobs and Gender, and play the accompanying records. To allow ample time for discussion, it would be best to allow one class period for each filmstrip. Use question from Discussion Guide for Jobs and Gender, pp. 8-9 and pp. 12-13.
5. Arrange through career education office to have resource persons who are in jobs usually not associated with members of their sex.
6. Appoint a committee to arrange a bulletin board with pictures and articles students find which relate to Jobs and Gender.
7. Ask students to write a paragraph or two telling why their opinions have changed or remained the same after viewing the filmstrips and discussing them in class.

Career Education Survey

Mansfield City Schools

School ____________________ Grade __________

Male __________ Female __________

I. Girls only check the following items.

I would like to take a course in:

- ________ Auto Mechanics
- ________ Wood Shop
- ________ Metal Shop
- ________ Electronics
- ________ Architectural Drafting
- ________ Mechanical Drawing

II. Boys only check the following items.

I would like to take a course in:

- ________ Cooking
- ________ Tailoring
- ________ Business Typing
- ________ Shorthand
- ________ Nursing
- ________ Office Practice

III. I plan to go to college but I would also like to take courses I have checked:

- ________ Business
- ________ Vocational
- ________ Home Economics
- ________ Industrial Arts

IV. Explain how you feel about women going into jobs such as--

Doctor
Veterinarian
Lawyer
Airline Pilot
Forest Ranger
Barber
Sports Reporter
Football Coach
Priest, Rabbi, Minister
Mechanic
Telephone Lineman
Truck Driver

____

____

V. Explain how you feel about men going into such jobs as--

Nurse
Secretary
Bookkeeper
Home Economist
Hair Stylist
Housekeeper
Child Care Worker
Cashier
Primary Teacher, K-2
Telephone Operator
Cook
Society Reporter

____

____

VI. Name some jobs that you think a woman could not fill. (Do not include being a father.)

________________________ ________________________

________________________ ________________________

VII. Name some jobs that you think a man could not fill. (Do not include being a mother.)

________________________ ________________________

________________________ ________________________

VIII. Girls only.

If I marry, I would work:

________ only if necessary to help support my family.

________ to build up a "nest egg."

________ to buy things we couldn't otherwise afford.

________ if I had skills or training that would meet needs in the community.

________ to provide a more satisfying life for myself.

IX. Boys only.

If I marry, I would want my wife to work:

________ only if necessary to help support my family.

________ to build up a "nest egg."

________ to buy things we couldn't afford otherwise.

________ if she had the skills or training that would meet needs in the community.

________ to provide a more satisfying life for herself.

X. To indicate whom you think should be responsible for the tasks listed below, place a W (Woman), an M (Man), or a B (Both) before the following:

________ Caring for children

________ Keeping house

________ Making legal decisions

________ Making financial decisions

________ Choosing careers for children

________ Protecting members of the family

________ Making family decisions

________ Providing food and shelter

________ Cooking

________ Grocery shopping

________ Doing the laundry

________ Mowing the lawn

________ Repairing things around house

________ Washing the car

Economics
Food
Home Economics 8

Developmental Objective

To affirm the advantages of utilizing a decision-making process in purchasing situations.

Behavioral Objectives

1. Given a discussion, the student will participate in determining criteria for making food purchases.

2. Given an assignment, the student will be able to decide which is the best buy among various brands and sizes of a designated item.

3. Given an assignment, the student will decide where to purchase a given list of items.

Material

Newspaper ads for groceries and household supplies.

Procedure

1. Ask the students how they can tell which is the best buy in a vegetable that can be obtained fresh, frozen, and canned. The teacher will suggest that they consider such factors as cost per serving, quality, intended use, storage, convenience, seasonal availability, size of family, and personal tastes. (Is it a good buy if no one will eat it?).

2. Suggest a vegetable to investigate and have the students make a chart with the following headings: Brand, Weight, Price, Number of Servings, Cost per Ounce, Cost per Serving.

3. Have students fill in the chart with information on three brands of the vegetable in several different sizes of cans and frozen-food packages. They should also add the appropriate information for the fresh vegetable. (They will need to find out from a text or a cookbook or estimate themselves how many servings can be made from the amount of the fresh vegetaole.) The teacher could choose one of the following methods of gathering the information:

    a. Arrange through the career education office for a field trip to a supermarket. In this case, the class might be divided into small groups, each having certain information to collect. Perhaps information could be obtained for a fruit as well as a vegetable.

    b. Appoint committees to obtain information and present it to the class.

    c. Make each student responsible for visiting a grocery store to secure the information.

4. Ask each student which would be the best buy for her family. Ask if the students decided on cost alone. If not, what other factors influenced their decisions?

5. Divide the class into small groups. Give each group a list of foods and household items. Distribute ads from several different stores and have students decide where to shop for the items on their list. Remind them to consider the criteria determined earlier.

6. Discuss the group decisions. If students decided to shop at several different stores, ask if they considered the value of their time and the cost of transportation. Also, ask if they were influenced by other factors such as the appearance of the ad or a favorite store.

SOUTH-WESTERN CITY SCHOOLS

Advertising: How and Why

This unit more than meets the criteria of the career orientation guidelines. It is strong in the language arts and social studies disciplines.

Guideline Directions for Implementation of the Unit "Advertising, How and Why"

1. This unit is designed to be utilized fully or partially at the teacher's discretion.
2. The intention of the authors is for each phase to choose only those objectives that they wish to meet.
3. Which and how many objectives will be taught and which suggested implementation activities will be used are at the discretion of the phase.
4. Evaluation will be made by pre-testing and post-testing only those objectives chosen by the phase.
5. The list of suggested test items is included solely as a teacher resource, not as a test for the students.
6. The phase may reword the test questions to meet the needs of their students as long as the new test questions keep within the guidelines of the objective. (Note to Math Teachers: It is up to you to decide the degree of difficulty that you wish to use and substitute the appropriate numbers.)
7. Answers for all test items are included after each test item.
8. Analysis of the pre-test and post-test can be done by simply taking the average of the student's scores within the phase as opposed to an item by item analysis. (Send these pre- and post-test results to Don Miller along with the "Number" of the objectives that were used., i.e., "We used objectives 1, 3, 5, 6, 7, and the average score was 58% correct.")
9. Any deletions or additions that the teachers wish to make to the list of activities is certainly in the best interest of student learning in this unit.
10. THIS UNIT IS MEANT TO BE BROAD AND FLEXIBLE--IMPLEMENT IT TO MEET THE NEEDS OF YOUR PHASE.

Advertising Appeals

Public Service Appeal: This advertising approach appeals to your sense of civic responsibility. The advertiser reveals the seriousness of a community problem and offers a workable plan of action. Typical public service themes are: ecology, drugs, health, education and various counseling programs. All public service advertising is designed to aid in the improvement of our standard of living.

Eye Appeal: This persuasive approach shows how good and how appealing a product looks, in order to suggest its smell, taste and texture. Usually, the advertiser illustrates his product through vivid colors and pleasing tones.

Statistical Appeal: This advertising approach appeals to people who demand proof based on factual data. Statistics and comparison figures are offered in the ad to guarantee that the product is foremost and most effective.

Humor Appeal: Appealing to the public through its funnybone is a common advertising technique. Everyone likes to see the humor in life and to laugh at themselves. By setting the product in a humorous background, the advertiser hopes to capture your attention.

Youth and "Feel Young" Appeal: This type of advertisement is geared with the young in mind or for those who wish to feel young. Appealing to our need to feel young and "with it," these advertisements cater to our vanity. The language employed in these ads is usually informal and regional.

Humble Appeal: This approach states that while the product may not be the world's best, it is constantly improving and changing with the times. The advertiser often asks for consumer suggestions on how to better meet the needs of the public. Modesty and humility are the main persuaders here.

RESOURCE

Tours and speakers from radio, television, newspaper, and advertising agency.

Below you will find 38 words connected with advertising in some way. You may check with the teacher's list of words after you have found as many as you can.

S	T	O	R	M	G	A	P	R	O	P	A	G	A	N	D	A	I	W	O
U	L	D	M	O	I	R	V	E	T	N	O	I	T	C	U	D	O	R	P
H	A	N	A	N	M	Y	B	T	H	I	N	G	I	S	E	D	E	L	S
R	E	I	N	T	M	D	L	H	T	E	W	O	R	M	E	A	N	T	O
E	C	R	Y	S	I	R	I	T	S	G	I	V	E	A	W	A	Y	A	N
T	C	L	A	S	C	O	C	R	E	H	P	A	R	G	O	T	O	H	P
I	P	A	P	O	K	R	I	N	T	L	V	T	N	A	O	S	T	O	R
R	P	L	Q	S	R	S	T	V	N	T	R	S	L	T	C	I	P	R	O
W	A	A	M	R	W	A	Y	O	O	E	A	R	A	D	Y	T	U	E	M
Y	O	Y	A	T	V	L	O	O	C	K	T	R	I	N	C	R	B	H	O
P	R	O	O	F	R	E	A	D	E	R	E	T	N	V	N	A	L	C	T
O	E	U	X	O	U	S	A	M	E	A	L	O	O	K	E	T	I	R	I
C	P	T	H	I	S	M	A	N	Y	M	E	R	M	O	G	P	C	A	O
O	A	R	L	I	C	A	K	H	E	N	I	Z	A	G	A	M	R	E	N
M	P	A	S	E	A	N	I	C	V	E	S	P	T	R	G	I	E	S	C
M	S	K	P	T	D	R	H	A	R	T	I	W	S	O	N	U	L	E	L
E	W	D	A	C	T	O	R	L	U	I	O	K	E	E	I	T	A	R	O
R	E	H	A	V	L	T	M	E	S	D	N	O	T	W	S	N	T	T	M
C	N	Y	T	H	R	I	P	E	A	C	L	A	S	S	I	F	I	E	D
I	L	O	V	E	T	D	A	Y	A	N	D	S	O	R	T	O	O	K	I
A	L	O	H	A	A	E	A	T	M	R	E	A	D	T	R	P	N	R	X
L	Q	I	V	T	Y	P	E	S	E	T	T	E	R	C	E	I	S	A	M
O	U	D	N	C	A	S	T	E	D	R	C	A	H	T	V	K	R	M	Y
A	E	A	C	A	S	T	L	E	I	B	N	O	T	H	D	E	O	A	M
M	W	R	C	O	R	N	E	R	A	I	G	A	M	M	A	O	K	G	B

Supplemental Activities

1. Have students find the hidden advertising words in the Word Puzzle included in the unit or have students make up one of their own.

2. Have students make up a crossword puzzle of advertising words.

3. Have students play Password using advertising words. (Can be patterned after games played on TV).

4. Have students play What's My Line? with small groups or the class guessing what the "contestant's" occupation is.

5. As one possible culminating activity, have the students set up a "flea market" in which they sell something they no longer need.

   a. Some students can be in charge of display.

   b. Some students can publish a class "Trading Times."

   c. Students can devise poster advertisements or handbills.

6. The teacher will prepare a bulletin board of magazine advertisements with the name of the product removed. The students can match as many visual symbols with their associated product or service as they can.

   Coca Cola graphic

   Marlboro Cowboy

   Mercury Cougar

   Mrs. Olsen (Folgers)

   Charlie the Tuna (Starkist)

List of Words for Puzzle

actor
ad
advertising
advertising agency
art
artist
classified
commercial
contest
copywriter
design
display
editor
gimmick
giveaway
layout
magazine
market
market researcher
media
model
photographer
product
production
promotion
proofreader
propaganda
publicity
public relations
radio
retail
sales
salesman
television
testimonial
typesetter
want ad
writer

GOAL: To clarify and extend the student's concept of advertising.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
I. The students will be able to list a minimum of three ways in which advertising is beneficial to man.	a. Discuss with students the five ways that advertising is beneficial, give examples.	a. Recall Differences Similarities Cause Effect Concluding	a. Social Studies Language Arts		a.
	b. Using newspapers and magazines have students list items that will be available on a given date. Also list new types of goods or different styles for clothing, cars, and so forth. Find ads that remind the consumer when it is time to make a change in tires or clothes.	b. Recall Cause Effect	b. Language Arts Social Studies Observation Science Home Economics		b.
Career Clusters: 1 - 15	c. Have students plan a food menu for one week using items listed in newspapers. Have students list and compare cost for one week's grocery bill.	c. Recall Differences Similarities Ordering Cause Effect	c. Math Home Economics		c.
	d. Have students make up ads incorporating the four ways ads reach the public.	d. Recall Cause Effect Making Choices	d. Language Arts		
	e. Using telephone book yellow pages, have students make lists of all pizza parlors that have free delivery service, and how close each parlor is to their homes. From this list ask each student to decide which parlor he would rather buy from and why.	e. Observe Differences Similarities Cause Effect Making Choices	e. Social Studies Language Arts		e.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
I. Continued.	f. Give student an item which he is to buy and have him find out what he needs to know and where he can go to find information.	f. Differences Similarities Cause Effect Concluding	f. Language Arts		f.
	g. Have students gather political ads and on the basis of what is advertised decide on a candidate.	g. Recall Similarities Differences Making Choices	g. Social Studies		

T What are three ways that advertising is beneficial to man?

TCC You are going into the advertising field. In an interview your prospective employer asks you to explain how advertising is beneficial to man. How would you answer him?

II. The student will be able to state the purpose of advertising from the seller's stand point.	a. Discuss reasons for using advertisements for bake sale, movies etc.	a. Cause Effect Making Choices	a. Social Studies Language Arts		
Purpose of advertising is to sell: a. ideas b. goods c. services	b. Compare an advertised product and its selling power to an unadvertised product. Take poll in class on type of toothpaste, soap, shampoo, used by students.	b. Recall Differences Similarities Ordering Cause Effect	b. Social Studies		
	c. Have students do survey of name-brand soap in its wrapper and in an unmarked wrapper asking people which they would choose.	c. Differences Similarities Making Choices			
Career Clusters: 2, 3, 12, 14	d. In a real or mock election, have students sell candidates	d. Recall Differences	d. Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
II. Continued.	through the use of posters, speeches.	Similarities Cause Effect Making Choices			

T Why does the seller advertise?
TCC You are a merchant. Why would it be beneficial for you to advertise your products?

III. The students will be able to define the role of the buyer in advertising.	a. Using advertising posters, have student construct a reaction test to be given to other students. Make charts to record reactions for each type of advertisement used. Have ads designed for older people, teenagers, young adults, younsters, middle ages. Discuss results of their findings of each type poster on a group of 12- and 13-year-olds, 10-year-olds, and 40- and 50-year-olds.	a. Observe Recall Differences Similarities Cause Effect Concluding Making Choices	a. Language Arts		a.
Career Clusters: 2, 12	b. Discuss the role of the buyer and how this effects advertising.	b. Recall Cause Effect Concluding			
	c. Given an ad, the student will write five observations about what he sees.	c. Observe	c. Science S-APA Observation		
	d. Using the observations above, the student will draw inferences about the age, sex, income level of the kind of person the advertiser is aiming his ad at.	c. Recall Differences Similarities Cause Effect Making Choices Concluding	d. Science S-APA Inference		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
III. Continued.	e. Interview store managers in the area to compile lists of products that have been discontinued.		e. Language Arts Social Studies		

T How does the consumer affect the way the seller advertises his product?

TCC You are an advertising agent. What do you have to consider from the buyer's point of view in order to construct an effective advertisement?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IV. The student as a seller will be able to determine what the retail price of an item should be when given the wholesale cost, overhead, advertisement cost, and percentage of profit desired.	a. Discuss and define terms: wholesale, overhead, retail, and so forth, and how each effects the price of an item.	a. Recall Differences Similarities	a. Language Arts		
	b. Have student compute various percentages of mark-up on an item to see the results in dollars and cents.	b. Recall	b. Math SWMSC #47		
	c. Have a bake sale and have each student determine cost of food baked (materials and labor if desired) and tell them you want a 25% profit to determine the cost of the item when sold.	c. Observe Recall Cause Effect	c. Math SWMSC #47		c.
	d. Have students compare the difference in retail price using different types of advertisements, i.e., radio, TV, different newspapers, direct mail.	d. Differences Similarities	d. Math SWMSC #22, 23 24, 25		
Career Family: 2, 10, 12	e. Have a group of students contact local department stores to inquire the percent of overhead allotted for shoplifting, and compute this to cost to the buyer.		e. Math Language Arts SWMSC #47		

T You buy an old dresser and want to fix it up and sell it. The dresser cost $10, the paint kit and sand paper cost $4.95. You advertise in a local paper for $3.50. You want to make a 20% profit. What will you charge for the finished dresser?

TCC You are a manager of a sporting goods store. You receive a shipment of one gross of ball bats at a cost of $288. You have an overhead cost of 15% of the wholesale cost. Your advertisement in the city paper costs $75 and the store owner wants a 6% profit. What would you charge for each bat?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
V. The student will be able to identify and discuss three ploys used in advertising. 1. Bandwagon 2. Plain Folks 3. Testimonial 4. Glittering Generalities 5. Bad Names 6. Glad Names 7. Black/white fallacy	a. Show the movie Truth and the Dragon. Discuss the different advertising ploys used to persuade buyers.	a. Observe Recall Differences Similarities Cause Effect Concluding	a. Language Arts		a.
	b. Have small groups, individuals or large groups listen to the tape series "Truth and the Dragon." In using small groups or individuals, have them present their advertising ploy to the class visually (posters, cartoons, plays, bulletin boards, mobiles or transparencies) or orally (lecture, panel discussion) to inform the class of the types of ploys used and what they are.	b. Observe Cause Effect	b. Language Arts		b.
	c. Have two students role-play a persuasive discussion in which different advertising ploys are used. (i.e., Mother persuading a daughter not to go to the Rock Concert.) Have the rest of the class record the different ploys used and then discuss this in large groups.	c. Observe Differences Similarities Cause Effect	c. Language Arts		c.
Career Clusters: 1 - 15	d. The student during an election will read or listen to a candidate's speech and critique it in regards to the advertising ploys.	d. Recall Concluding	d. Social Studies Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
V. Continued	e. Using several speeches or advertisements, have students list the different advertising ploys.	e. Recall Differences Similarities Ordering	e. Math SWMSCH #55, 56, 57 Social Studies		
	f. Given a speech or advertisement, have students distinquish between facts and opinions.	f. Recall Differences Similarities Cause Effect Concluding	f. Science Classification Language Arts		f.

T List three ploys used by advertisers or candidates to persuade buyers that their product or candidate is best.

TCC You are a campaign manager. Write a speech selling your candidate by the use of bandwagoning. You are a sales promoter. Using glittering generalities, write an advertisement for your company's toothpaste.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VI. Given a list of advertisements, the student will be able to correctly match the advertisement with the appeal approach being used. Various appeals that are used along with explanation of each is provided below. Career Clusters: 3, 7, 12 Correlating Careers: Technical writer, research director, public relations worker, display artist	a. Make hand-outs from the sample of the various appeal approaches. Pass these out and discuss these with the students.	a. Observe Differences Similarities Cause Effect	a. Social Studies Language Arts		a.
	b. Have students make notebooks matching appeal approach used with the advertisements.	b. Observe Differences Similarities Ordering	b. Social Studies Language Arts		
	c. Have each student design an advertisement for a product of his choice.	c. Recall Making Choices	c. Language Arts		
	d. Have skits demonstrating advertisement's various appeals.	d. Observe	d. Language Arts Social Studies		
	e. Have students make bulletin boards for appeal groups.	e. Ordering Making Choices	e. Language Arts Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VI. Continued.	f. Make a display of all materials used with this objective.	f. Observe Recall Differences Similarities Cause Effect Ordering Making Choices	f. Language Arts Art		

T Evaluate the notebooks according to activity #2. Each student should have at least 20 advertisements with 90% accuracy.

TCC You are an advertising agent for a manufacturer who has just invented a new razor blade. What appeal approaches should you use to sell the product to a young adult?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VII. Given advertisements or advertising target population, student will be able to match the advertisement with the group to whom the advertiser is directing his appeal.	a. Have the class separate into categories various groups to whom an advertiser might direct his advertising. (This might be done in terms of age, sex, income level. Classifications are are arbitrary.)	a. Observe Differences Similarities	a. Science S-APA Classification		
	b. Have students use magazines or newspapers to find advertisements which would appeal to all categories and those with appeal limited to individual categories of buyers.	b. Observe Differences Similarities Cause Effect Making Choices	b. Social Studies		
	c. Have each student write three advertisements for a product of his choosing, directing the appeal to three different age levels.	c. Recall Differences Similarities	c. Language Arts		
	d. Have students in small groups tape record two commercials for a product of their choosing - in the first, appeal is being directed to men, in the second, appeal is being directed to women.	d. Observe Recall Differences Similarities Making Choices	d. Language Arts		
	e. Hand out a dittoed list of products (ex. Geritol, Tide, Barbie Doll, Chevrolet, Pepsi, STP Motor Oil). Given the weekly television section from the newspaper or TV Guide, the student will list for each one two television programs which an advertiser might select to expose his product and one the advertiser would definitely not select. (Have the student state reasons to justify his choices.)	e. Observe Ordering Differences Similarities Cause Effect Making Choices	e. Language Arts Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VII. Continued	f. Have the student watch five television programs of his choosing. The student will keep a record of all products advertised on each. Have the students classify the programs in terms of categories determined in Activity a.	f. Observe Differences Similarities Ordering Cause Effect Concluding Making Choices	f. Social Studies Science (S-APA Classification) Language Arts		
	g. Discuss in class the relationships between the type of audience appeal programs have and the kind of products advertised.	g. Recall Differences Similarities Cause Effect Making Choices	g. Social Studies Language Arts		

T How does an advertiser seek out the best media situation for exposting his client's product?

TCC You are an advertising researcher. Your client is selling a teenage blemish medicine. What would be a good TV program on which to air your client's product?

VIII. Given a choice of three stores in equally convenient locations, the student will be able to determine which one will be the most economical for him by using advertisements put out by the stores in question.	a. Obtain grocery advertisements and have the students find cost of items by looking up the price.	a. Observe Recall Differences Similarities	a. Math SWMSC #17, 18, 20, 30		
	b. Have students collect receipts of groceries and add the cost per month.	b. Recall Ordering	b. Math SWMSC #17, 18, 20, 30		
	c. Set up mock store in room.	c. Recall Making Choices	c. Math SWMSC #17, 18, 20, 30		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
Career Clusters: 1 — 15	d. Have student compare cost of like products at various stores, e.g., records, radios, television sets.	d. Observe Recall Differences Similarities Ordering	d. Math SWMSC #17, 18, 20, 30		

T Using three store advertisements given, find the total cost of the following list at each store.*

5 lb. sugar	3 lb. chicken	1 head of lettuce
3 lb. coffee	3 lb. hamburger	2 cans of peas
1 lb. bologna	10 lb. potatoes	1 gal. of milk

TCC You are shopping for a 19" color television and wish to find the best buy. What will you do to determine the best buy and where will it be?

*Note this could be used for stores other than grocery, e.g., hardware, department, drug, record shops.

IX. Given an advertisement which mentions a certain percent charged for interest on time payments, or a certain percent off on an item, the student will be able to figure the total final cost of the item in terms of dollars and cents.	a. Gather advertisements which mention percent off and have the students compute the actual savings in terms of money.	a. Observe Differences Similarities Ordering	a. Math SWMSC #47		
	b. Give a set of problems such as-- $4.50 shows what percent was marked down from the original price of $6-- have students work these and find problems of this nature in advertisements.	b. Recall Differences Similarities Ordering	b. Math SWMSC #48		
	c. Have students find advertisements which invite you to pay so much down and so much per month. Then have the students compute the actual cost of the item. Filmsource- The Youthful Consumer).	c. Observe Differences Similarities Ordering Cause Effect	c. Math SWMSC #44		
	d. Have students work problems computing the cost of 1 1/2% of the unpaid balance each month showing them that this is 18% per year.	d. Recall	d. Math SWMSC #46		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IX. Continued.	e. Have students compute amount in a savings account at the end of one year. The rate is 5% per year paid quarterly, and he saves $20 a month.	e. Recall Ordering	e. Math SWMSC #47		
	f. Have students compute their city income tax (1 1/2%) and state income tax (4% of gross), giving them random salaries.	f. Recall Ordering	f. Math SWMSC #47		
	g. Have students bring in real estate advertisements showing payment amount per month and have them compute actual cost of the house.	g. Observe Differences Similarities Ordering	g. Math SWMSC #23		

T If an advertisement read "20% off of regular price" and an item regularly sold at $25, what would you expect to pay for the item?

TCC You are a clerk in a hardware store and your boss tells you to mark the hammers which sell for $4.50 down 10%. How much would you charge for each hammer?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
X. Given a set of advertisements, the student will be able to explain which are more effective and write/or tell why.	a. Bring in packaged products and discuss the effectiveness of the design.	a. Observe Differences Similarities Cause Effect	a. Language Arts		a.
	b. Have students bring in their favorite advertisement or describe one seen on TV and explain why it is their favorite.	b. Observe Differences Similarities Cause Effect Concluding	b. Language Arts		b.
	c. Have students bring in an advertisement which is very effective and one which is less effective.	c. Observe Differences Similarities Cause Effect Making Choices			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
X. Continued.	d. A bulletin board can be made, divided into two parts - effective and ineffective. The students will discuss and justify their choice for placement.	d. Differences Similarities Ordering Cause Effect Concluding Making Choices	d. Science (S-APA-Classification) Social Studies		
	e. Play games related to objective. See resource career cluster 3, 12, #7.	e. Recall			

T After comparing two advertisements from the same media, the student will explain in writing which is more effective and the reasons.

TCC You are a manager for the men's department at a large department store, how would you make a decision on one advertisement out of many because of its effectiveness?

XI. The students will be able to write a paragraph or sentence explaining the three stages of advertising and when and how each is used.	a. Discuss with the students the three different stages of advertisements.	a. Differences Similarities	a. Language Arts		
	b. Watch TV, make list of commercials and put each in the stage it belongs.	b. Observe Recall Differences Similarities Ordering	b. Social Studies Language Arts		
Career Clusters: 3,4,9,12	c. Clip out ads from magazines and newspapers. Categorize the ads under their proper stages.	c. Observe Recall Ordering	c. Social Studies Science (Classification)		
	d. Have students create a fictitious product and write or create an ad in the primary stage, selective stage, and retentive stage.	d. Recall Cause Effect Making Choices	d. Language Arts		d.

T Write a paragraph explaining the three stages of advertising and how each is used.

TCC Your firm manufactures salt. Which stage of advertising would you use to promote your product? Why? (selective or retentive)

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XII. The student will be able to explain the four requisites for effective communication in advertising. 1. It must be so designed and delivered as to gain the attention of the receiver. 2. It must use signals that are understood in the same way by both source and receiver. 3. It must arouse needs in the receiver and suggest some way of satisfying these needs. 4. It must suggest a way of satisfying these needs which is appropriate to the group situation in which the receiver finds himself when he is moved to make the response desired.	a. Discuss with the students the four requisites for effective communication and how they apply to advertising.	a. Recall Differences Similarities Cause Effect	a. Language Arts		
	b. Students will examine advertisements and indicate in writing the portion of the advertisement that satisfies each of the four requisites.	b. Observe Ordering	b. Language Arts		
	c. Create an advertisement that incorporates the four requisites for effective communication.	c. Recall Cause Effect Making Choices	c. Language Arts		c.
	d. Have students present to the class orally a creative advertisement that employs the four requisites.	d. Observe Recall	d. Language Arts		
	e. Evaluate several written advertisements to see if they contain the four requisites.	e. Observe Differences Similarities Ordering	e. Language Arts		
	f. Using tapes of radio advertisements listen for the four requisites and discuss the effectiveness of those containing all four requisites compared with those that do not contain all four.	f. Observe Recall Differences Similarities Making Choices	f. Language Arts		
	g. Bring a TV into the classroom and critique the advertisements for the four requisites of effective communication.	g. Observe Differences Similarities Ordering Making Choices	g. Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
Careers Clusters: 3, 12	h. Using the results of activities e, f, and g discuss the different ways each form of advertising meets the four requisites of effective communication.	h. Recall Differences Similarities Concluding Making Choices	h. Language Arts		

T What are the four requisites of effective communication in advertising?

TCC You work for a large department store and have been asked to design an advertising gimmick to attract customers to your ladies' wear department. Design such an advertisement using the four ideas of communication.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XIII. The student will be able to list orally or in writing four methods used in political advertising and conclude which method he feels is most effective and his reasons.	a. Read the book The Packaging of a President and discuss news media used.	a. Observe Recall	a. Language Ads		
	b. Write an advertisement or speech for a politician of your choice.	b. Recall	b. Language Arts Social Studies		
	c. Design posters that could be used in an election.	c. Recall Differences Similarities Making Choices	c. Art Social Studies		
	d. Using creative dramatics, have students stage a television show in which different students play roles of different noted persons (i.e., actors, professional ball players, Congressmen) endorsing candidates.	d. Differences Similarities Cause Effect Making Choices	d. Language Arts Social Studies		d.
	e. Have students design campaign slogans.	e. Recall Making Choices	e. Language Arts		
Career Clusters: 3, 14	f. Write for information concerning the cost of TV time for advertising, radio time for advertising, bulk rates for mailing, and rates for advertising in magazines (color, black and white). Compare costs.	f. Recall Differences Similarities Cause Effect Concluding Making Choices	f. Language Arts		f.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XIII. Continued.	g. Using the figures gathered in activity f, compute the cost of one hour of television advertising time.	g. Differences Similarities Concluding	g. Math SWHS #22		

T Write four methods used in political advertising and explain which would be best for a sheriff to utilize.

TCC You are a campaign manager for a presidential hopeful. Which forms of advertising would you use and why?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XIV. When given a product in various quantities, the student will be able to choose the best bargain for him.	a. Discuss the advantages and disadvantages of large quantity buying.	a. Differences Similarities Concluding	a. Math SWMSC #20, 23,24,25		
	b. Bring in empty cans and boxes to school with prices on them and find the cost per unit.	b. Recall Ordering	b. Language Arts		
	c. Have students interview adults asking what size detergent they buy and why.	c. Differences Similarities Ordering Questioning	c. Language Arts		
	d. Compare name-brand products and unknown products by ads or looking in stores at prices. Decide which is the better buy.	d. Observe Differences Similarities Ordering Cause Effect Condluding	d. Math SWMSC #79 & 83		
Career Clusters: 1 — 15	e. Compare sizes of containers and determine amount of product in each size.	e. Observe Differences Similarities Ordering Concluding			

T Which of the following would be the best buy for beans?
1 can of beans at 17¢ for a 1 lb. can
1 can of beans at 29¢ for a 28 oz. can
2 cans of beans for 33¢ (1 lb. can size)

TCC You need 3 lbs. of grass seed and a store has the following advertisement.
1 lb. box of grass seed for $2.29
2 lb. box of grass seed for $4.00
Which would be the best buy for you and why?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XV. The student will be able to compare the quality of advertised products by testing them in a laboratory situation.	a. Given five laundry powders, the student will test and compare them on the basis of any criteria the teacher decides upon. Ex. time of dissolution for each (in hot water, warm water, cold water), time required to dissolve grease.	a. Observe Differences Similarities Ordering Cause Effect Concluding	a. Science		
	b. Have the students graph the dissolution time for each.	b. Observe Differences Similarities Ordering	b. Science Math SWMSC 55,56,57		
	c. Have the students use magazines, newspapers, or the boxes themselves to find out and list what claims each manufacturer makes for his product.	c. Observe Ordering	c. Science		
	d. Discuss in class the claims made for each product compared with the results of their experimentation.	d. Observe Differences Similarities Cause Effect Concluding	d. Science Language Arts		

T What can the consumer do himself to test claims made for products by their advertisers?

TCC You are working in a consumer research laboratory. A company has just introduced a new window cleaner. What steps would you take to verify the claims made by the company?

XVI. The student will be able to define and describe a direct relationship between product testing and research and advertising.	a. Have the students test baking soda for as many possible uses as they can find (Ex. fire extinguisher, cleaning product, mouth wash, deodorizer, tooth polish).	a. Observe Cause Effect Making Choices	a. Science		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE [illegible]ION-
XVI. Continued.	b. On the basis of the students' findings, have them list as many claims as they can which they believe would help sell the product.	b. Observe Recall Differences Similarities Concluding Making Choices	b. Science		
	c. Using the list of claims, have the students create advertisements for baking soda.	c. Recall Differences Similarities Concluding	c. Science Language Arts		

T How are product researchers important to advertising agencies?

TCC You are working in a laboratory of a company which is introducing a new cleaning product. Your job is to provide the advertiser with as many uses for the product as you can. What steps would you take to provide the advertiser with the claims he needs?

XVII. The students will be able to explain the steps in making an advertisement for a newspaper.	a. Students will plan and draw a mural producing an advertisement.	a. Recall Differences Similarities Ordering Making Choices	a. Art Language Arts		
	b. Have an advertising man from the newspaper talk with the students and demonstrate how an advertisement is laid out. (See resource #6)	b. Observe Questioning			
	c. Have the students pick out what they consider to be poorly written advertisements and improve them.	c. Observe Differences Similarities Cause Effect Concluding	c. Language Arts		
	d. Have students write a classified advertisement.	d. Recall	d. Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XVII. Continued.	e. Have students proofread ads for spelling and grammatical errors.	e. Observe	e. Language Arts		

T What are the steps that the newspaper follows in producing an advertisement?

TCC You work in the classified advertiseing department of a large newspaper and have just received a rough draft of an advertisement from a customer. What must you do to this advertisement before publishing it?

Career Clusters: 1, 2, 3, 4, 5, 7, 9, 10, 12

Correlating Careers: Layout man, editor, typesetter, proofreader, writer.

XVIII. The student will be able to write a paragraph telling the advantages of using newspaper advertisements.	a. Gather newspapers and list the types of items being advertised. Group these items.	a. Observe Differences Similarities Ordering Grouping	a. Language Arts Social Studies		
	b. Find examples of full-page advertisements. Cut the word "advertisement" from the top of the page. Compare this with a full page of news stories. Have students distinguish between the two.	b. Observe Recall Differences Similarities Cause Effect	b. Language Arts		b.
	c. Give students copies of different newspaper advertisements. After examing three or more of these, discuss the different aspects that clue the reader to that fact that these are advertisements.	c. Observe Differences Similarities Cause Effect Concluding	c. Language Arts		
	d. Compile a list of words that are clues to advertisements.	d. Recall Grouping	d. Language Arts		
	e. Given a newspaper advertisement, student will be able to list the words that are clues that distinguish it as an advertisement.	e. Observe Differences Similarities Grouping	e. Social Studies Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XVIII. Continued.	f. Go through a newspaper and count the number of news stories, advertisements and/or entertainment features. Graph results.	f. Observe Differences Similarities Ordering Grouping	f. Math SWMS - #56		
	g. Examine newspapers from each day of the week. Using the lists of items from activity a count the numbers of advertisements of each type for each day. Graph results.	g. Observe Ordering Grouping	g. Language Arts Math SWMS - #58		
	h. Using the results gathered in activities f and g over papers from several different days of the week. Discuss which day would be best to advertise a given type of product and why. Career Clusters: 2, 3, 12, 13	h. Observe Differences Similarities Ordering Cause Effect	h. Language Arts Math SWMS - #55		h.

T Given a news story and a newspaper advertisement, the student will be able to pick out the advertisement.

TCC You manage a small independent grocery store. What would be the best day of the week to advertise and why?

XIX. The student will be able to write three reasons why newspapers are so important in advertising to the consumer. Reasons: 1. It is a shopping medium in which readers have a voluntary interest where they are seeking out advertisements that will help them in making a wise decision.	a. Take a poll of students that take newspaper in their homes.	a. Observe Ordering	a. Socail Studies		
	b. Have newspaper man talk to class concerning importance of newspaper in advertising. Discuss how much paper would cost with and without advertisements.	b. Observe Differences Similarities Cause Effect Concluding	b. Social Studies Language Arts Math SWMS - #18		b.
	c. Have students look in the newspapers for employment advertisements.	c. Observe			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
2. Newspapers are a daily habit. 3. Newspapers have immediate and exciting news. 4. Newspapers blanket a market. 5. Newspapers can be kept for future reference.	d. Have students look in paper for advertisements concerning automobiles. Compare prices of some make and model cars from different ads. Career Clusters: 3, 4, 12 Correlated Careers: Advertising consultant	d. Observe Differences Similarities	d. Math SWMS - #18		

T Give at least three reasons why newspapers are important to the advertising field?

TCC You are a realtor and you have property to sell. Why would it be advantageous to list your property in the newspaper?

XX. The student will be able to determine the cost of a newspaper advertisement when given the cost per line and the number of spaces per line.	a. Call newspaper office and find out the cost per line and approximate number of spaces per line. Compare the costs of two or more newspapers and discuss the differences.	a. Observe Differences Similarities	a. Language Arts		
	b. Bring classified ads to school and have students compute cost.	b. Observe Differences Similarities	b. Language Arts Math SWMS - #22		
	c. Have students spell out abbreviations and compute savings by using abbreviations.	c. Observe Differences Similarities Ordering	c. Language Arts Math SWMS - #22 & #18		
Career Clusters: 1 – 15	d. Through discussion, weigh the advantages of advertising in either the Dispatch or a neighborhood newspaper depending on advertiser's needs. (Ex. rummage sale at church, and annual white sale at department store.)	d. Observe Recall Differences Similarities Ordering Cause Effect	d. Language Arts		d.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XX. Continued.	e. Given an envelope of classified ads cut from a newspaper, each student will classify them (by sorting) into conventional categories, categories set up by the teacher, or those devised by the student.	e. Observe Recall Differences Similarities Ordering Grouping Labeling	e. Science (classification) Social Studies		
T	Given that a newspaper classified advertisement costs 75¢ per line and that a line consists of 25 spaces, figure the cost for the following advertisement: Yorkshire Terrier puppies; 11 weeks old; AKC reg.; puppy shots; Contact Mary after 5 pm at 278-4394.				
TCC	You are an auctioneer. Write an advertisement costing $3.00 giving the location, time of auction and types of merchandise to be auctioned. Use the cost and number of spaces per line given in the above test item.				
XXI. The student will be able to write three things advertisers need to know about a radio station before giving their business to that station. A. Station Coverage B. Rating C. Type of people station is geared to. D. Personality of radio personnel.	a. Looking at sample broadcast coverage map, have the students list towns reached during the day and compare this with those reached by same station at night.	a. Observe Differences Similarities	a. Social Studies Language Arts		
	b. Have students write to the radio stations in the area asking them for coverage maps. Compare coverage of each station. With this information discuss which station reaches the most people (remember to check for population density) and which would be more advantageous to the advertiser in general.	b. Recall Differences Similarities Ordering Questioning	b. Language Arts Math SWMSC - #20, #43, #44		
	c. Write letters asking for rate schedules and make similar comparisons.	c. Differences Similarities	c. Math SWMSC #20		
	d. Discuss importance of station personnel and their services with the students.	d. Differences Similarities Cause Effect	d. Language Arts		
	e. Have a field trip to a radio station. (See resource #1).	e. Observe Questioning			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
Career Clusters: 3, 12	f. Have a radio station person visit the class or have a taped interview.	f. Observe Questioning	f. Language Arts		
T List three things that an advertiser must take into consideration when deciding on a radio station with which to advertise his merchandise.					
TCC You are a merchant wishing to use a radio station to advertise your merchandise. There are three stations in your area. How would you go about deciding which station to choose?					
XXII. Given a choice of radio station ratings, the student, as a merchant, will be able to choose the station best suited to advertise his merchandise.	a. Give the students imaginary problems such as: "What radio station would be best to advertise a high priced new car, a new rock album, a new printing of the bible, a piano?" Using the ratings below, the student explains why he'd choose the station. Sample of ratings: Station — Rating — Description A — 5.0 — Popular music, good news coverage, strong announcer personalities, good signal. Well liked by adults of middle and upper-income groups. B — 4.7 — Exclusively rock "n" roll music, poor news coverage, hipster type disc jockeys. Popular with teenagers and lower income groups.	a. Differences Similarities Cause Effect Concluding	a. Science S-APA Observation Inference Classification Predicting		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XXII. Continued.	Station / Rating / Description C / 4.0 / Popular music, good sports coverage, good news coverage, fair personalities. Weak on promotion, but well liked by young adults and families of middle and upper-income groups. D / 2.5 / Country music and religious programming, weak signals, poor news coverage, no major sports. Appeals to hillbilly-type audience of very low income.				
Career Clusters: 1, 3, 12, 10	b. Have students take a survey of which radio station people listen to and compare this to the local ratings.	b. Observe Differences Similarities Cause Effect	b. Language Arts		

T If you want to advertise a sale on bell-bottomed jeans which local radio station would you choose and why? Use the rating list given.

TCC You are a new car dealer and wish to advertise on the radio. Which stations would you choose if you are limited to two because of your budget.

XXIII. The student will be able to write a paragraph or a sentence telling the advantages of using the radio as an advertisement medium.	a. Have the students make a questionnaire to be presented to the general public surveying the number of hours and the time of day in which they listen to the radio.	a. Observing Recall Differences Similarities Ordering	a. Language Arts		
	b. Have students compile the data from the above activity on a graph (bar or linear).	b. Recall Ordering	b. Math - SWMS Science 57 & 58		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XXIII. Continued	c. After observing the data, decide what time of day and which station would be best to advertise a given product.	c. Recall Differences Similarities Ordering Cause Effect	c. Social Studies Science Observation Inference		
	d. Have the students listen to an ad on the radio, or a tape of one, and write a description of what they think the person in the ad looks like. Follow up with finding the true appearance of the person to demonstrate the lack of a need for an actor who "looks the part."	d. Recall Anticipating	d. Language Arts		
Career Clusters: 1, 2, 3, 4, 5, 7, 9, 12, 13, 14	e. Have student listen to radio ad and tell which age group the ad is geared for and have them check to see if the survey shows the correct age group is listening at the time of day the ad is on the air.	e. Observe Differences Similarities Cause Effect Anticipating	e. Language Arts Math SWMS #55		

T Write a paragraph telling the advantage of using the radio as an advertising medium.

TCC You own a record shop. Why would it be more beneficial to advertise by radio than newspaper?

Subject Areas Pertaining to Advertising

Advertising Art

Business **Propaganda**
Public Relations
Retail Trade
Salesman and Salesmanship

Commercial Art

Electric Signs (plus books pertaining to use of electric to make signs)

Mail-Order Business

Marketing

Packaging

Posters

Printing-Specimens

Propaganda

Public Relations

Publicity

Radio Advertising

Salesmen and Salesmanship

Show Windows

Sign Painting

Signs and Signboards

Advertising - References for Students

070.69R	*So You Want to Go into Journalism*
R331.7C	*Concise Handbook of Occupations*
331.7(car)	*Summer Jobs*
339.4L	*The Consumer*
R340	*Handbook of Everyday Law*
371.4	*Lovejoy's Vocational School Guide*
384S	*News and How it Travels*
419	*Signs and Symbols Around the World*
500P	*Superstition or Science*
510B	*Life Science Library of Mathematics*
510H	*How to Live with Statistics*
537.2	*The Story of Electricity*
537F	*All About Electricity*
537S	*Electricity*
537-5V	*Electronics in Everyday Things*
655F	*Pages, Pictures and Print*
655.1	*First Book of Printing*
655D	*Printing Tool of Freedom*
621.384	*All About Radio and Television*
621.38	*The Telephone*
655.3R	*Your Future in Printing*
658.87S	*Your Future in Retailing*
658	*Your Future in Department Store Merchandising*
658	*Careers in Business Management*
702.3R	*Art Careers*
745.5	*Boy Scouts of America Salesmanship*
745.5	*Boy Scouts of America Radio*
745.5	*Boy Scouts of America Art*
745.5	*Boy Scouts of America Business*
745.5	*Boy Scouts of America Printing*
745.6	*Lettering*
920F	*Titans of Business*
920F	*Fathers of Industries*
B Och	*Printer's Devil to Publisher*

Advertising - References for Adults

Occupational Outlook Handbook
Consumer Reports Magazine
Consumer Reports (lg ed.)

327	Propaganda Game
371.33	Listen-Hear Series: Propaganda Techniques
371.42	Occupational Guidance
371.42	Occupational Exploration Kit
371.42	SRA Work Widening Occupational Roles Kit
371.42	Desk-Top - Career File
371.42	Cassette Tapes #7 - Persuasive Interest Occupations--Sales, Advertising, Reporter
160 f.s.	Making Comparisons (filmstrip)

Filmstrip/Cassettes
Newspaper-- 1. Reading Daily Newspapers
2. Preparing News for Print

Filmstrip/Record
The Great Sell

Reel-to-Reel Tapes	On Propaganda

Occupational Information - DOX Chronical Guidance

Business Careers Kit

640.73	Sound Filmstrip Kit - The Modern Consumer
640.73	The Youthful Consumer

Films - Sound Elementary Economics (South-Western Film Library)

Advertising Slogans - Make Flash cards of these slogans and play a game.

Advertising Slogans: You've heard them on TV and radio. You have seen them countless times in newspapers and magazines, now do you remember the product they advertise? In five minutes time, see how many you can remember by writing in the name of the product in the space provided.

1. Look, ma, no cavities________________
2. We try harder ________________
3. You're in good hands with________________
4. Things go better with ________________
5. Milk from contented cows________________
6. . . . . has a better idea________
7. Melts in your mouth, not in your hands ________________
8. Good to the last drop ________________
9. A little dab'll do you________________
10. Try it, you'll like it!________________
11. I'd rather fight than switch________________
12. Up, up and away, with ________________
13. Finger-licken' good ________________
14. Wonder where the yellow went________
15. The beer that made Milwaukee famous ________________
16. As solid as the rock of Gibralter______
17. Fly the friendly skies of ________________
18. Won't wear off as the day wears on ____
19. Covers the earth ________________
20. Double your pleasure, double your fun ________________
21. Aren't you glad you use________________
22. . . . . tastes good like a cigarette should ________________
23. Champagne of bottled beers ________________
24. You've got a lot to live ________________
25. Say it with flowers ________________
26. Relief is just a swallow away________
27. King of beers ________________
28. . . . . mark of excellence______
29. You can take . . . . . out of the country ________________
30. I'd walk a mile for a ________________
31. When it rains, it pours________________
32. Breakfast of champions________________
33. You can drink it and sleep________________
34. Better things for better living, through chemistry________________
35. 99-44/100% pure ________________

GOVERNMENT PUBLICATIONS

List in numerical order when ordering. Limit of two copies of any single publication.

Catalogue number	Title
0100-1826	Budgeting for the Family
7700-059	Don't be Gypped (Bait and Switch Advertising)
Pamplets	
621.3	Careers in Television, Radio and Communications
664	Careers in Food Products Distribution
659.1	Careers and Jobs for Women as Advertising Artists
Books and Booklets	
659	Your Career in Advertising, by George Johnson
658.8	Your Career in Selling, by Robert A. Liston
659.1	Career Opportunities in Advertising for Men and Women
741.6	Art in Advertising by David K. Stone
659.12	Ads, Women, and Boxtops by Duane Jones
659.1	Advertising Fundamentals by Burton and Miller
659.12	Packaging Power by Walter P. Marqulies
659.13	Tested Advertising Methods by John Caples
	Advertising Ideas by John Caples
	Making Ads Pay by John Caples
	Advertising for Immediate Sales by John Caples
659.132	How to Write a Good Advertisement by Victor Schwab

SOUTH-WESTERN CITY SCHOOLS

Energy Crisis

This is an excellent example of a central topic or theme being integrated into all subject areas. Materials may be used by individual teachers or by a teaching team.

Assessment Procedures:

Included within this unit is a pre-test and post-test which is to be utilized for assessment purposes.

The individual test items are numbered to correspond with the various objectives of the units. Each test item consists of two (2) parts; the first part of the test item (T) is related to the various curriculum areas. The second part of the test item (TCC) is related to the various job clusters of the Careers Continuum Project.

The test items pretaining to the job clusters (TCC) are included to determine the extent to which students become more aware and knowledgeable about various careers as a result of the inclusion of career materials in the middle school curriculum.

Career representatives within each building are to administer the pre-test prior to the presentation of the unit to the middle school students.

The pre-test is then to be collected and tabulated to determine the number of correct and incorrect responses for each career test item (TCC).

Following the presentation of the unit, career representatives are to administer the post-test. The post-test is to be collected and again tabulated to determine the total number of correct and incorrect responses for each career test item (TCC).

The results of the pre-test and post-test are to be sent to Donald Miller, director of Career Continuum Project, Central Office.

Test Items

1. T What are five reasons advanced civilizations (societies) need more energy?

TCC Briefly describe how a historian gathers information concerning the rise of a civilization and its increased energy demand.

2. T List five types of fuel used in the area.

a.

b.

c.

d.

e.

TCC List three fuels which the gas station owner provides for the community.

a.

b.

c.

3. T Briefly explain why Columbia Gas of Ohio will not place gas lines to new homes in Franklin County after October 1, 1972.

TCC Since Columbia Gas of Ohio will not allow gas lines to be put into new homes after October 1, 1972, what effect will this have on the plumbers and their unions?

4. T List two reasons for and two reasons against the building of the oil pipeline across the northern slope of Alaska.

a.

b.

TCC What part do lobbyists play in the government approval of the Alaskan oil pipeline?

5. T Match fuel, gas, oil, or coal with the country that produces the most.

Gas Oil Coal

________________________ Kuwait

________________________ U.S.S.R.

________________________ Canada

TCC Briefly describe the role interpreters play in worldwide distribution of fuels.

6. T Briefly explain the importance of the whaling industry as a fuel source during the early 1800's.

TCC Why are merchant marine and commercial fishermen no longer allowed to hunt whales for whale oil?

7. T Briefly explain how American oil interests in the Middle East have affected our foreign policy with the Arabs and the Jews.

TCC What part do diplomats play in keeping oil trade open between the U.S. and the Middle East?

8. T Write a paragraph describing man's early uses of fire.

TCC List two careers involved in researching early man's discovery and use of fire.

9. T List five abuses of fuels by our society. (Ex. electric pencil sharpeners)

TCC How do appliance and toy manufacturers contribute to the abuse of our available energy sources?

10. T List five jobs necessary to obtain petroleum.

a.

b.

c.

d.

e.

TCC Briefly describe the role of the petroleum geologist in obtaining petroleum.

11. T Write a brief paragraph expressing the opinion of a gas company employee concerning the completion of the Alaskan oil pipeline.

TCC Same as above.

12. T Match the following 5 jobs with their description.

Petroleum geologist
Paleontologist
Mineralogist
Rig Builder
Petroleum Engineer

a. Studies physical and chemical properties of mineral and rock samples.

b. Studies fossil remains in the earth to locate oil-bearing sands.

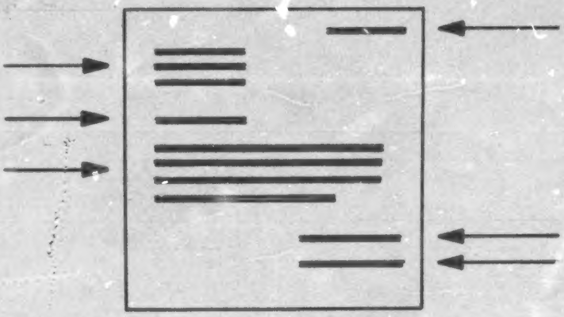
c. Studies the surface and subsurface composition of the earth.

d. Installs drilling rigs to support the machinery and equipment which raise and lower the drilling tools.

e. Plan and supervise the operation and maintenance of wells.

TCC Same as above.

13. T Label the parts of a business letter.



TCC You are a secretary employed by the Columbus and Southern Ohio Electric Company. Label the parts of the given business letter.

14. T List five ways that electricity directly affects your life.

a.

b.

c.

d.

e.

TCC List five appliances you have in your home which consume electricity and may require the services of a repairman.

a.

b.

c.

d.

e.

15. T Give the following table:

Car Model	Gasoline Mileage	Waste Emitted/gal.
Cadillac	12 mile/gallon	170 units/gallon
Barracuda	17 mile/gallon	120 units/gallon
Toyota	24 mile/gallon	152 units/gallon

Fill in the blanks:

The car which is most economical to run (assuming high-test gasoline for all) is__________________.

Using the same table as in the previous question, the car which is best ecologically is__________________.

TCC Briefly describe the role engine designs play in making cars economical and ecologically sound.

16. T The average number of miles Mr. James drives in a month is 542 miles. His car gets approximately 20 miles to the gallon. How many gallons does Mr. James have to purchase per month?

TCC A bulk gasoline distributor brought to Mr. Green's gas station 50,000 gallons of gasoline on June 1. Mr. Green had 568 separate sales of gasoline during June. What was the average quantity of gasoline sold at each sale?

17. T The number of gallons that your automobile used in one month is approximately 87 gallons. The average cost of gasoline was 37.9 cents a gallon. Compute the monthly cost of gasoline.

TCC When three gas station owners become involved in a gas price war, the price goes down 5 cents per gallon. The original price was 37.9 cents a gallon. You use 87 gallons per month. How much will you save if the gas war lasts all month?

18. T If the income of a family is $ 10,000 and the amount spent on gas and/or electric is $ 400, what percent of the income is spent for gas and electric?

TCC Briefly describe the role of the meter reader in determining your monthly gas bill.

19. T Data for electrically cooled and gas heated home.

The costs for the summer months (May-Sept.) are:________
The total costs for the winter months are:________________

Therefore, the months of ______ are greater by $__________.

Electric Costs

January	February	March	April	May	June
$10.50	$11.25	$11.00	$12.00	$13.50	$18.75

July	August	Sept.	October	Nov.	December
$19.00	$20.00	$13.75	$11.00	$10.00	$13.00

Gas Costs

January	February	March	April	May	June
$19.50	$20.50	$14.75	$11.00	$ 7.30	$ 4.75

July	August	Sept.	October	Nov.	December
$ 4.50	$ 4.50	$ 6.00	$12.00	$14.25	$17.00

TCC Briefly describe how the insulation installed by the contractor of your house would affect your heating and cooling costs.

20. T If a coal miner makes $12,000 a year and works 50 weeks for 40 hours a week, how much does he make per hour?

TCC Same as above.

21. T Factory A uses 24,650 kilowatt hours per month, business B uses 12,362 kilowatt hours per month. What would the yearly use be of each?

TCC The foreman of factory A says his plant uses 26,450 kilowatt hours per month and the plant manager of factory B says his plant uses 12,362 kilowatt hours per month. What would the yearly use be of each?

22. T If the average monthly cost of heating a home in Grove City is X, a home in Alaska is Y, an a home in Florida is Z, what would the yearly cost be?

TCC The average monthly cost for a home in Grove City is X, a home in Alaska is Y, and a home in Florida is Z. Which home would an accountant compute to be the least expensive to maintain?

23. T Name the units of measure for each of the following:

Gas ____________________ Coal ______________________________

Oil ____________________ Electricity ___________________________

TCC What "unit of measure" does the statistician use to measure?

24. T Identify three different kinds of coal mines.

a. Digging up large areas down to about 50 feet.

b. Mine dug down straight into the ground.

c. Mine dug horizontally into side of hill.

d. Large drill into the earth that is then pulled out with the coal.

Answers: a. strip mine
b. shaft mine
c. drift mine
d. auger mine

TCC Same as above.

25. T Name at least three products made from oil. (Answer: plastics, gasoline, man-made cloth fibers, propane, paint, paint thinner, lighter fluid, motor oil, household oil.)

TCC List three items manufacturers of oil base products would produce.

26. T Name four steps through which coal must pass before it is used by the consumer. (Answer: Coal is mined, sorted, graded for quality, washed, shipped, sold.)

TCC You are a mine foreman. When the coal leaves you, what three steps does it go through before it reaches the consumer?

27. T List three fuels that are used to produce electricity and explain differences of each. (Answer: coal, gas, oil, nuclear.)

TCC List three fuels that a boiler operator may use in the production of electricity.

28. T Number the following in correct sequence. Use 1, 2, 3, 4.

__________ Foreign particles removed.
__________ Pumped from well.
__________ Pipeline to bulk storage.
__________ Pumped to consumer under pressure.

TCC Match these four occupations with the step each one is concerned with in getting gas from a well to the consumer (Use choices in T.)

a. dehydration plant operator
b. compressor station operator
c. gas compressor operator
d. gas well driller

29. T Match the hazard with the fuel.

Natural Gas	______	A. Explosion
Gasoline	______	B. Fire
Fuel Oil	______	C. Drunkeness
Coal	______	D. Jubliee
Charcoal	______	E. Asphyxiation (fumes)
Kerosene	______	F. Skin Irritation
Sterno	______	G. Skin Burns
Brandy	______	H. Poisoning

TCC You are a fireman. Which hazard should you be aware of with each of these fuels?

30. T List five steps in oil production from exploration to consumption. (Answer: locating, construct rig and drill, pump from earth, transport to refineries, refined, packaged and sold.)

TCC If you were to ask a petroleum geologist, how would he list the five steps that oil goes through from the ground to the consumer?

31. T Pick one of the following fuels and describe how that fuel was formed: coal, gas, oil, peat.

TCC How would a petrologist describe the formation of fossel fuels?

32. T Which of the following conditions must be present for a fuel to burn? (Answer: high temperature, hydrogen, flammable material, low temperature, oxygen.)

TCC You are a clothing manufacturer trying to make clothes that won't burn. What is necessary besides oxygen and high temperature for combustion to take place?

33. T Explain briefly two differences between coal and charcoal.

TCC List two reasons why a lumberjack would be concerned with charcoal rather than coal.

34. T Explain in one paragraph how wind can be used as a source of energy.

TCC Why would a farmer on that prairie want to use a windmill to generate electricity?

35. T List the four basic food groups and the amount of calories per gram in each.

TCC List the four basic food groups and the amount of energy each will produce in calories per gram. Tell why a dietician would be interested in this.

36. T If 510 barrels of crude oil will produce only 30% the quantity of refined oil, compute the amount of refined oil obtainable.

TCC A bulk distributor's truck has 375 barrels of crude oil which will produce only 1/3 the quantity of refined oil, compute the amount of refined oil obtainable from the truckload.

37. T Sue Ann Marsh's metabolic rate is 2800 kilocalories and her Monday food intake was the following:

Breakfast	2 fried eggs	210 calories	Snack	Coke	200 Calories
	8 oz. orange juice	110 calories		Hershey Bar	570 Calories
Lunch	Bread with butter	125 calories	Dinner	Lettuce and Tomato Salad with dressing	145 Calories
	Chocolate milkshake	250 calories		Breaded Liver	350 Calories
	Double Cheeseburger	468 calories		White Rice	115 Calories
	Potato Chips	250 calories		Lemon Meringue Pie	250 Calories
	Apple	100 calories			
			Snack	Glass Milk	160 Calories

If she continues to eat the same amount each day, will she gain, lose, or maintain her weight?

TCC You are a doctor, would you prescribe the above diet for your paitent to lose weight?

38. T If the amount of coal needed to raise steam pressure by one pound per sq. ft. in an electric generator is 325 pounds, how much coal would be needed to raise the steam pressure from 10 pounds/sq. inch to 27 pounds/sq. in.?

TCC If a boiler operator wanted to raise the steam pressure by 10 pounds per sq. ft. in an electric generator and he knew the amount of coal needed to raise it one pound per sq. ft. was 1/4-ton of coal, how much coal would he need?

39. T Briefly describe the purpose of the editorial page in a newspaper.

TCC As a newspaper editor, what is your purpose in writing an editorial page?

40. T List four ways we can ease our energy crisis.

TCC List one way in which each of the following people can cut down on fuel waste.

Car Manufacturers________________ Building Insulators________________

Appliance Manufacturers____________ Insulation Installers________________

41. T Briefly define "crisis."

TCC How would a lexicographer define the term "crisis"?

T Briefly define the term "fuel."

TCC How would an historian describe "fuel"?

T Briefly define the term "energy."

TCC What can an etymologist tell us about the word "energy"?

42. T Write a commercial for a consumer fuel company.

TCC Same as above.

43. T Briefly state in writing the main idea in the attached article, "This Energy Crisis-Is It Real?"

TCC What would a magazine publisher consider the main idea in the article, "This Energy Crisis-Is It Real?"

ENERGY CRISES

GOAL: To clarify and extend the students concept of the current energy crisis.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
1. Each student will list five reasons why the demand for energy increases as the civilization advances.	a. View film on Venezuela or Middle East pointing out their level of civilization. Compare it with our level of civilization, and show how much more we use energy than they.	a. Recalling Similarities Differences Concluding	a. Social Studies Math Language Arts		a.
	b. Show graph and have student explain difference in energy consumption.	b. Similarities Differences Ordering	b. Math Social Studies Language Arts		
	c. Assumption: Imagine that next January, a sleet storm cut off electricity in Grove City for a week. List 10 (or more) effects this would have on your life.	c. Anticipating Inferring Effects	c. Social Studies Language Arts		c.
	d. Discuss recent innovations (within the last 5 to 10 years) that use more energy, but add to our comfort and convenience.	d. Recalling Making Choices Inferring Effects	d. Language Arts Social Studies Science		d.
	Related Careers: a - b Sociologists Historians Statisticians Census-Takers Poll-Takers Data Processors				
2. Each student will list five types of fuel used in the Grove City area.	a. Have students list as many types of fuels used in Grove City as they can, and discuss the reason for using each.	a. Recalling Cause Inferring Effects Concluding	a. Language Arts Social Studies		
	b. Research one career dealing with the type of fuel used.	b. Observing	b. Language Arts Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
2. Continued	c. Interview a gas station owner, ask where he gets his gas, how he feels about his location, what are his responsibilities to the company, and the company's responsibility to him.	c. Questioning	c. Social Studies Language Arts		
	d. After viewing the film Birth of a Gas Station, students will discuss and compare needs, activities, and responsibilities of attendant in film with interview taken in activity c.	d. Recalling Differences Similarities Causes Inferring Effects	d. Language Arts Social Studies		
	Related Careers: Petroleum and natural gas production and processing occupations, engineers, geologists, plumbers, electricians, power plant occupations, gas station owners, bulk oil destribution, lumberjack.				
3. Each student will give reasons why Columbia Gas of Ohio will not allow builders to place natural gas lines in new homes in the Franklin County area after October 1, 1972. Students will discuss causes and effects of this decision.	a. Have a representative from Columbia Gas of Ohio explain the gas shortage.	a. Observing	a. Language Arts Social Studies		
	b. Discuss the gas shortage.	b. Recalling Causes Inferring Effects Concluding	b. Social Studies Language Arts Science		b.
	c. Distribute literature from the gas company explaining the gas crisis.	c. Observing	c. Social Studies		
	d. Have contractor or builder tell of his course of action now that no gas is available for home use. Students will prepare questions for this resource person.	d. Observing Questioning	d. Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
3. Continued	Related Careers: Carpenters Plumbers Electricians Heating Contractors Insulation Installers Inspectors Legislators Statisticians				
4. Each student will list two pros and two cons concerning the completion of the Alaskan Oil Pipeline.	a. Discuss reasons for and against the completion of the Alaskan oil pipeline.	a. Recalling Causes Concluding Anticipating	a. Language Arts Social Studies		
	b. Guest speakers: Conservationist, petroleum geologist. Suggest video-taping these for review. After both speakers have presented their views of oil and the ecology, conduct a discussion of the causes and effects of each speakers' point of view.	b. Recalling Causes Inferring Effects Inferring Feelings	b. Language Arts Social Studies Science		b.
	Related Careers: Conservationists, petroleum and nautral gas production and processing occupations, legislators, engineers, surveyors, geologists, lobbyists, naturalists (ecologist).				
5. Each student will be able to identify Kuwait as the world's leading producer of oil, Russia as the world's leading producer of coal, and Canada as the world's leading producer of natural gas.	a. Discuss size, location and population of Kuwait, U.S.S.R., and Canada.	a. Recalling Differences Similarities	a. Language Arts Social Studies		
	b. Using pictorial maps, discuss fuels and the country they come from.	b. Observing Recalling Causes Inferring Effects Similarities Differences	b. Language Arts Social Studies		
	c. Make a comparative map to scale of these three contries.	c. Observing Similarities Ordering Differences	c. Social Studies Math	c.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
5. Continued	d. Make a world pictorial map of natural resources. Drawing lines from sources to consumer countries.	d. Recalling Differences Similarities	d. Art Science	d.	
	e. Discuss the benefits small, non-producing countries enjoy from the right-of-way pipeline revenues. (Ex. Lebanon, Israel, Syria)	e. Recalling Inferring Effects	e. Language Arts Social Studies		
	Related Careers: Statisticians, geologists, interpreters, natural gas and oil production, miners, ship-builders, merchant marine.				
6. Each student will verbally or orally explain why the whaling industry was an important source of fuel during the early 1800's.	a. Have students research and report on the whaling industry during its peak.	a. Observing Recalling	a. Language Arts Social Studies		
	b. Tour museum.	b. Observing	b. Social Studies	b.	
	c. Using the Readers Guide, find the most current uses of whales the international regulatory bodies, and literature pertinent to the whaling industry today.	c. Observing	c. Language Arts Social Studies		
	Related Careers: Merchant marine occupations, commercial fishermen, wholesalers and retailers of sea products, ship building industry, glassblower.				
7. Each student will give a written or oral explanation of the relationship between our oil interest and foreign policy with the Arab and Israeli nations in the Middle East.	a. Students will prepare questions for a visiting Arab and Israeli students' view on our foreign policy toward their countries.	a. Questioning Observing	a. Social Studies Language Arts		
	b. Students will write to the general offices of various oil companies to determine what percentage of their oil is imported.	b. Making Choices	b. Language Arts Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
7. Continued	c. Have students role-play diplomats for the U.S., U.S.S.R., Israel, and Arab nations to show dependency between producing and consuming countries.	c. Making Choices Similarities Differences	c. Language Arts Social Studies	c.	
	d. Discuss why it is sometimes advantageous to remain on good terms with other people.	d. Recalling Causes Inferring Effects	d. Language Arts Social Studies		
	e. Make a map of the Mediterranean area showing all countries backed by the Communist countries and those countries aligned with the free world.	e. Recalling Similarities Differences	e. Art Social Studies	e.	
	Related Careers: Interpreters, lobbyists, foreign trade industry, diplomats, armed forces, federal civilian employment.				
8. Students will be able to write a paragraph using correct grammatical and sentence structure.	a. Have groups act out their concept of man's early uses of fire.	a. Recalling Causes Inferring Effects	a. Social Studies Language Arts	a.	
	b. Draw mural depicting man's discovery of fire.	b. Recalling	b. Social Studies Art	b.	
	c. Draw comic strip showing the discovery of fire.	c. Recalling	c. Social Studies Art	c.	
	d. View movie Writing a Good Paragraph. Use techniques observed in writing a paragraph explaining uses and needs of fire.	d. Recalling Causes Differences Similarities	d. Language Arts Social Studies	d.	
	Related Careers: Archaeologist, anthropologist, linquist, pictographers, technical artist, museum curators (and museum staff).				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
9. Students will list and give written or verbal explanation of the causes and effects of our society's abuses of fuel.	a. Students will discuss luxuries man has provided for himself which consume our resources. (Ex. electric can openers, escalators, electric knives.)	a. Recalling Causes Inferring Effects	a. Language Arts Social Studies		
	b. Read and discuss an article in the Readers Guide concerning fuel abuses by our society.	b. Observing Causes Inferring Effects Similarities Differences	b. Language Arts Social Studies		
	c. Make table display and/or bulletin board entitled "things you can do without."	c. Recalling Similarities Differences Making Choices	c. Art Social Studies	c.	c.
	d. Have a panel of students present TV and radio cammercial.	d. Recalling Making Choices	d. Language Arts Art	d.	d.
	Related Careers: Appliance manufacturers, advertising, environmental scientists, ecologists.				
10. Each student will be able to list five jobs necessary to obtain petroleum.	a. Have students research and report on petroleum careers.	a. Observing Recalling Ordering Making Choices	a. Language Arts Social Studies		a.
	b. Get speakers to come to the class and describe their jobs in obtaining petroleum. Students will have prepared questions to ask guest speakers.	b. Observing Questioning	b. Language Arts Social Studies		
	c. Have students prepare a petroleum-career related bulletin board showing individuals at their jobs.	c. Making Choices Ordering	c. Art Social Studies	c.	c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
10. Continued	d. Game adaption of "What's My Line?" Have students ask questions of Mystery Guest Career Person (role-played by student) and guess his job.	d. Recalling Questioning Making Choices	d. Language Arts Social Studies	d.	d.
	Related Careers: Petroleum geologist, chemist, minerologist, paleontologist, rodmen, prospecting drillers, shooters, engineers, rig builders.				
11. Given interviewing questions, students will give written or oral explanation of the various points of of view concerning the completion of the the Alaskan oil pipeline.	a. Using prepared questions, students will interview a gas company employee and conservationalist to obtain their opinions concerning the completion of the Alaskan oil pipeline.	a. Questioning Making Choices	a. Language Arts Social Studies	a.	a.
	b. Using the movie Your Communication Skills: Listening. Students will discuss the importance of critical listening.	b. Observing Recalling	b. Language Arts		
	c. Write an article for the school newspaper, or local paper, on the class guests and their topics.	c. Recalling Making Choices	c. Language Arts Social Studies		c.
	Related Careers: Petroleum extractor, gas company employees.				
12. Students will select and describe five petroleum related careers.	a. Invite speakers to come to the class and describe their jobs in obtaining petroleum. Students will prepare questions related to purpose of discussion.	a. Making Choices Questioning	a. Language Arts Social Studies		a.
	b. Game: "Bingo." Provide each child with card ruled into squares, each square containing a job title. Read off job description and have child cover the appropriate title.	b. Recalling Differences Similarities	b. Social Studies	b.	

OBJECTIVE	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
12. Continued	c. Students select, research, and orally report specific jobs related to petroleum industry.	c. Observing Ordering	c. Language Arts Social Studies		
	Related Careers: Petroleum geologist, chemist, minerologist, paleontologist, planetable operators, rodmen, prospecting drillers, shooters, engineers, rig builders.				
13. Students will write a business letter, identify and label its parts.	a. Using proper business form, students will write and mail two letters inquiring about employment opportunities related to fuel industry. (View film. Writing Different Kinds of Letters.	a. Observing Questioning Making Choices Labeling	a. Language Arts Social Studies		a.
	b. Students select and reply to a want ad listing a job opportunity related to fuel industry.	b. Making Choices Causes	b. Language Arts Social Studies		b.
	Related Careers: Applies to all careers which require format letters for business communication.				
14. Each student will select five ways he uses electricity each day and explain at least one effect this has on his life.	a. Discuss the uses of electricity in our everyday life. Imagine what life would be like without electricity. Discuss the sources of energy that produce electricity.	a. Recalling Inferring Effects Anticipating Causes	a. Language Arts Social Studies Science		
	b. List as many ways as you can that you use electricity in one day. (Sequential ordering, from alarm clock on, may be helpful.)	b. Recalling Ordering			b.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
14. Continued	Related Careers: Freezer manufacturers, cooler manufacturers, washer manufacturers, food mixer manufacturers, food chopping and food grinding manufacturers, movie projector manufacturers, appliance repairman.				
15. Given a data table depicting gasoline consumption for several makes of automobiles and the relative waste emission data, the students will identify the most economical and best ecological make of automobile.	a. Using copies of Consumer Report from various car manufacturers, students will record and discuss statistical information on comparative gasoline mileage and quality of gasoline necessary for good operation.	a. Recalling Causes Inferring Effects Similarities Differences	a. Math (SWCMS Objective 55)		
	b. Prepare bulletin board of comparative statistics based on the findings in activity a. Compute and draw a graph on amount of waste emitted.	b. Recalling Ordering	b. Social Studies Art	b.	
	Related Careers: Ecologist, professional drivers, gas station attendants, refiners, automobile designers, engine designers.				
16. Given a truck driver's trip miles for one month and the gasoline consumption per mile, the student will compute the number of gallons consumed in one month.	a. Provide students with practice exercises in calculating the number of gallons needed to run a car or truck for one month, given the monthly driving distance and the gasoline consumed.	a. Recalling	a. Math (SWCMS Obj. 25)		
	b. Compare gasoline (miles per gallon) usage for various makes of cars and motorcycles (i.e., have students calculate miles per gallon for a car and note the make and model).				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATIONSHIP	AFFECTIVE RELATIONSHIP
16. Continued	c. Discuss conservation of energy as it relates to fuel consumption.	c. Similarities Differences Inferring Effects Causes Concluding Generalizing	c. Social Studies Science		
	Related Careers: Petroleum processing and distributing, gasoline service station workers, wholesale trade salesmen, bulk distributor.				
17. Given the number of gallons of gasoline one car used in a month and the average cost of gasoline per gallon the student will calculate the monthly cost of gasoline to the nearest dollar.	a. Provide students with practice exercises in computing monthly gasoline costs, given the number of gallons purchased per month, and the average gasoline cost per gallon. (Viewing "Brushing Up on Multiplication" precedes this activity.)	a. Recalling	a. Math (SWCMS Obj. 44)		
	b. Discuss how gas wars affect the consumer.	b. Recalling	b. Social Studies		
	c. Have students find out the size of their family car. Compute the cost for filling the tank with their favorite gasoline.	c. Recalling	c. Math Social Studies		
	Related Careers: Gas station operators, bulk gas dealer, engine designers.				
18. Given a gas or electric bill for an average family for one year, the student will compute what percent of the yearly budget is spent for gas and electric.	a. Review percent and how to find percent of a total amount.	a. Recalling	a. Math (SWCSM Obj. 48)		
	b. Assign student work-sheet giving practice in problems similar to objective.	b. Recalling	b. Math Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
18. Continued	c. Have students talk to parents about their own gas and electric bills. Report causes for variation in bills.	c. Questioning Causes	c. Language Arts Social Studies Math	c.	c.
	d. Have students contact by letter or interview gas and electric company to obtain information on conserving gas and electricity. Related Careers: Meter readers, accountants, electricians.	d. Observing Causes Inferring Effects	d. Language Arts Social Studies		
19. Given a chart, students will be able to compute rate differences of gas and electricity for the summer and winter months.	a. Discuss reasons why gas bills increase in winter and electric bills increase during summer months. Design graph to illustrate changes. Share and compare with class.	a. Recalling Causes Inferring Effects Ordering	a. Math (SWCMS Obj. 17) Social Studies	a.	
	b. Review sequence of months, number of days per month and seasons of the year as they affect changes in gas bills.	b. Recalling Causes	b. Social Studies		
	c. Review decimal addition (money addition problems). Related Careers: Meter reader, heating and air conditioning repairman, contractor insulation installer.	c. Recalling	c. Math		
20. Students will compute the hourly wage of a coal miner.	a. Discuss the various hourly wages of an oil rigger, coal miner, hydroelectric plant worker, nuclear energy plant worker, and lumberjack.	a. Similarities Differences Conclusions	a. Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
20. Continued	b. Provide worksheet to review necessary math processes -- division and comparing numbers.	b. Recalling	b. Math (SWCMS Obj. 23 &25)		
	c. Provide practice worksheet with problems similar to the objective.	c. Recalling Making Choices Similarities Differences	c. Math (SWCMS Obj. 23 &25)		
	d. Math relays, giving students an opportunity to work related problems at the board.	d. Recalling Making Choices Similarities Differences	d. Math (SWCMS Obj. 23 &25)		
	Related Careers: Oil rigger, coal miner, hydroelectric plant engineer, nuclear energy plant worker, lumberjack, electrical engineer.				
21. Given a factory's monthly kilowatt consumption, students will compute the yearly kilowatt usage in a heavy industrial plant and a light industrial plant.	a. Contact a business, such as a shopping center, and a factory to gain the average monthly kilowatt use. Review multiplication to get the yearly use and compare the two.	a. Recalling Questioning	a. Math (SWCMS Obj. 23)		
	b. Discuss the metric system and prefixes as related to kilowatts.	b. Recalling	b. Math		
	c. Prepare a metric system bulletin board as related to activity a.	c. Recalling Ordering	c. Math Language Arts	c.	
	d. Have an electric company service representative come to class and explain the parts of a bill. Students prepare questions to ask service representatives.	d. Questioning	d. Language Arts Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
21. Continued	Related Careers: Store manager, plant manager, or foreman.				
22. Given the average monthly cost of heating homes, the student will compute the yearly heating costs for a home in Grove City, a home in Alaska, and a home in Florida.	a. Review multiplication and comparison on numbers.	a. Recalling	a. Math (SWCMS Obj. 23)		
	b. D. cuss the differences in heating and cooling costs around the world.	b. Recalling Differences Concluding	b. Social Studies		
	c. Have students rank areas from highest cost to lowest cost for heating.	c. Recalling Ordering Concluding	c. Math (SWCMS Obj. 23)		
	d. Provide practice in computing average monthly cost of heating and cooling from several sample bills.	d. Recalling	d. Math (SWCMS Obj. 23)		
	Related Careers: Insulation installers, accountant.				
23. Student will identify the basic units of measure of gas, oil, coal, and electricity.	a. Provide exercises in computation with gas, oil, coal, and electric measurement.	a. Recalling	a. Math		
	b. List five units of measure which students have used and explain use.	b. Recalling	b. Social Studies		
	Related Careers: Statistician				
24. Students will identify three types of coal mines and state the major differences among each.	a. View movie on coal mining.	a. Observing Recalling Making Choices	a. Social Studies		a.
	b. Role-play workers observed. Read and discuss the four main methods of coal mining and the reasons that each is used.	b. Observing Recalling Causes	b. Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATIONS ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
24. Continued	c. Draw cut-away diagram of the different methods of coal mining.	c. Recalling Similarities Differences	c. Social Studies Art	c.	
	d. Make models of various types of coal mines.	d. Recalling Making Choices	d. Art Social Studies	d.	d.
	Related Careers: Strip mine operator, bulldozer operator, truck driver, conveyor operator, crusher operator, cost analyst, payroll clerk, mine foreman, or superintendent.				
25. Pupils will name at least three products made of petroleum.	a. Have students research a product to find out how it is produced.	a. Observing Questioning Similarities Differences Making Choices Concluding	a. Science		
	b. Have students report their findings orally to the class.	b. Recalling	b. Language Arts		
	c. Film Improve Your Oral Reports	c. Observing	c. Language Arts		
	d. Make a bulletin board or showcase display of petroleum products which students bring to class.	d. Observing Making Choices Ordering Concluding	d. Art	d.	d.
	Related Careers: Chemist and chemical researchers, typists and secretaries in chemical field, translators, manufacturers of oil base products, advertisers, public relations for oil base products.				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
26. Students will name the basic steps in the process of getting coal from the ground to the consumer.	a. Build model of coal tipple.	a. Recalling	a. Art	a.	
	b. Go to coal yard, obtain samples of several sizes and grades of coal. Learn their common names.	b. Observing Recalling	b. Social Studies		
	c. Make mural of steps from mine to consumer.	c. Recalling	c. Art Social Studies	c.	
	d. Visit power plant to see how coal, is processed for industrial use.	d. Observing Recalling	d. Social Studies		
	Related Careers: Mine foreman, mine supervisor, mining machinery manufacturer, mining machinery maintenance and repairman, truck driver, railroad engineer, fireman, brakeman, conductor, telegraph operator for railroad, coal barge operator, seaman on barge carrying coal.				
27. Students will identify methods of generating electricity.	a. Have students research the different methods of generating electricity including hydroelectric, steam (fired by gas, coal, oil), or nuclear energy.	a. Observing Recalling	a. Social Studies Science		
	b. Divide class into three groups. Have each group research one method of generating electricity. Present oral report.	b. Observing Making Choices	b. Social Studies Science		b.
	c. Locate and research three electricity generating plants in the United States (one of each type). Share with class.	c. Observing Recalling	c. Social Studies Science		
	d. View film Electricity - How It Is Generated	d. Recalling	d. Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
27. Continued	Related Careers: Electricians, instrument repairman, pipefitters, boilermakers, maintenance mechanic, boiler operators, turbine operators, watch engineers.				
28. The student will name the steps in the process of getting gas from a well to the consumer.	a. Film The Story of Natural Gas (Columbia Gas of Ohio) Discuss.	a. Recalling Ordering	a. Science		
	b. Have students make bulletin board display depicting the steps from well to consumer.	b. Observing Ordering Concluding	b. Science Art Social Studies	b.	
	c. Have a speaker from the gas company explain the steps and jobs involved in each step.	c. Questioning	c. Science		
	d. Present students with a list of steps and have them number them according to the proper sequence.	d. Ordering	d. Science		
	Related Careers: Dehydration plant operator, compressor station operator, gas compressor operator.				
29. Pupils will match fuels with possible hazards.	a. Have person from fire department or fire prevention bureau talk to students on hazards of fuels. Students will prepare questions to ask resource person.	a. Observing Questioning	a. Science		a.
	b. Use nurse to talk to class on hazards of fuels and poisoning.	b. Observing	b. Science		b.
	c. Students will make checklists of possible fire hazards to check in their own homes.	c. Observing Recalling Making Choices	c. Social Studies	c.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
29. Continued	d. Have the students make diorama of hazardous fuel situations.	d. Recalling	d. Social Studies		
	e. Have a poster contest warning against hazardous fuel situations.	e. Recalling	e. Social Studies	e.	
	Related Careers: Firefighter, distiller, insurance investigator, nurse, insurance agent and underwriter, otolaryngolgist, explosives expert, plastic surgeon, fire resistant products manufacturer.				
30. Student will list five steps that oil goes through from the ground to the consumer.	a. Film on oil production from American Petroleum Institute 1801 "K" Street, NW, Washington, D.C. 20006	a. Observing	a. Science		
	b. Have students research related careers and match them with each step.	b. Recalling Ordering Inferring Effects Concluding	b. Language Arts Social Studies Science	b.	
	c. Diagram the steps that oil must pass through in order to reach the consumer from the earth.	c. Recalling Ordering	c. Language Arts Science		
	d. Have students build a model of a gas well and the gas station and the places for each step in between.	d. Recalling Similarities Differences Ordering Making choices	d. Art Science	d.	d.
	Related Careers: Petroleum geologist, mineralogist, petrologist, rig builders, shooters, shothole drillers, rotary drillers.				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
31. Student will describe the process in the formation of fossil fuels.	a. Study the formation of fossil fuels as a group.	a. Observing Recalling	a. Science		
	b. Independent activity: Bring in rock and coal samples and find fossils or their remains in the coal or rock.	b. Observing Similarities Differences Making Choices	b. Science	b.	
	c. Use any available film on formation of coal, oil, or gas.	c. Observing	c. Science		
	d. Have students make cross section diagrams of fossil fuel formation showing the most significant geologic changes.	d. Recalling Observing	d. Science	d.	
	Related Careers: Petroleum geologists, paleontologist, mineralogists, photogeologists, petrologists.				
32. Student will describe the basic process of combustion of fuels.	a. Put different flammable items on tin plate and heat with flame. Time how long it takes for different items to burst into flame and discuss why. (Stress thermal temperature.)	a. Observing Inferring Causes Making Choices	a. Science	a.	
	b. Discuss causes why some items are flammable and others are not. Also why some flammable items make better fuels than others.	b. Recalling Inferring Causes Inferring Effects	b. Science		
	c. Put cover over burning candle and watch flame go out. Discuss why. Have students infer possible reasons. (CO_2 is produced and O_2 is consumed by flame, but flame is actually smothered by CO_2.)	c. Observing Inferring Causes Inferring Effects	c. Science	c.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
32. Continued	d. Discuss conditions that cause combustion to occur slowly or quickly.	d. Recalling Inferring Causes	d. Science		
	e. Invite firefighter to speak and answer previously prepared questions.	e. Observing Questioning	e. Social Studies Science		e.
	Related Careers: Firefighters, chemists, clothing manufacturers.				
33. Each student will be able to explain in writing the differences between coal and charcoal.	a. Discuss differences between coal and charcoal.	a. Recalling Similarities Differences	a. Science		
	b. Students will display and write illustrated description of coal and charcoal.	b. Recalling Making Choices Similarities Differences	b. Art Science Language Arts	b.	b.
	c. Discuss the hazards of using charcoal under certain conditions.	c. Recalling Inferring Effects	c. Language Arts Social Studies		
34. Student will explain how wind can be a source of energy.	a. Construct a windmill, attach a generator and utilize it to light a small bulb.	a. Recalling Making Choices	a. Science	a.	a.
	b. Discuss wind as a transfer of energy forms (i.e., heat, convection causes air currents).	b. Recalling Inferring Causes Inferring Effects Concluding	b. Science		
	c. Make a display of electric appliances that create air currents (i.e., fan, hairdryer, vacuum).	c. Observing Recalling Making Choices Ordering	c. Art Science	c.	c.
	Related Careers: Construction workers, mechanical engineers, farmer.				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATIONSHIP	AFFECTIVE RELATIONSHIP
35. Each student will list the four basic food groups and the amount of energy each will produce in calories per gram.	a. Research four basic food groups and have each student clip pictures to represent examples. Provide charts of data to discuss amount of calories available per gram for each of four different foods.	a. Recalling Ordering Making Choices	a. Science	a.	a.
	b. Have small group visit (and videotape) an organic food store. From their findings, they should prepare one day's menu.	b. Recalling Making Choices	b. Science	b.	b.
	c. Make bulletin board with pictures collected from four food groups.	c. Recalling Ordering	c. Art Science	c.	
	d. Have students make a one-day record of what they ate.	d. Recalling Ordering	d. Language Arts Science		
	e. Discuss the nutritional value in the popular "snack" foods.	e. Recalling Inferring Causes	e. Science		
	Related Careers: Dieticians, physicians.				
36. Given an amount of crude oil and the percentage of its refined oil contents, students will compute the amount of refined oil obtainable.	a. Provide students with exercises in which they practice computation with fractions and percents of given quantities.	a. Recalling Making Choices Ordering Concluding	a. Science Math		a.
	b. Have students determine by research, job training activities, and responsibilities of the following careers-- 1. geologist 2. paleontologist 3. mineralogist 4. shothole drillers 5. rig builders and helpers 6. derrickman 7. petroleum engineers	b. Recalling Ordering	b. Language Arts Social Studies		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
36. Continued	b. Continued 8. pumpers (roustabouts) 9. maintenance crews, welders, carpenters, electricians, machinists 10. stillman (coker or cracking operator) 11. pumpmen 12. treaters 13. refinery mechanics 14. chemist and laboratory technicians 15. administrative personnel 16. typists, stenographers 17. systems analyst, key punch				
	c. Have students make circle graphs showing fraction of refined oil content.	c. Recalling Ordering	c. Math	c.	
	d. Discuss processes involved in refining crude oil.	d. Recalling Ordering	d. Social Studies Science		
37. Given a person's metabolic rate (in kilo-calories or calories per day) and his food intake (broken down into meals and snacks with their calorie count), the student will indicate whether that person will gain, lose, or maintain his weight if he keeps up the same diet.	a. Invite a physician or researcher to speak on human use and abuse of foods and discuss prepared questions.	a. Making Choices Questioning	a. Science		a.
	b. Have students keep a detailed daily account of everything he consumes in a 24-hour period and provide calorie counters so students can calculate their caloric intake. Have them compare this to their actual caloric needs.	b. Recalling Ordering Differences Similarities	b. Science	b.	
	c. Review and apply metric system prefixes.	c. Recalling Similarities Differences Making Choices	c. Science Math		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
37. Continued	d. Have students record weight daily for one week. Figure loss or gain, and discuss results.	d. Recalling Ordering Similarities Differences	d. Math Science		
	e. Have students find the nutritional value of snack foods and soft drinks. Compare these with servings of food from the four food groups.	e. Recalling Ordering Similarities Difference	e. Math Science		
	Related Careers: Farmers, cooperative extension service workers, soil conservationists, agricultural economists, agricultural engineer, agronomists, animal physiologists, animal husbandmen, veterinarians, geneticists, plant pest control inspectors, entomologist, human nutritionists.				
38. Given the amount of coal needed to raise the steam pressure in an electric generator one pound per square inch, the student will compute the amount of coal needed to raise the pressure of the steam to a given higher temperature.	a. Provide practice exercises in computing coal needed to raise steam pressure in electric generators.	a. Recalling Ordering Making Choices Concluding	a. Science Math		a.
	b. Diagram how an electric generator works and discuss its operation.	b. Recalling	b. Science Social Studies	b.	
	c. Visit the boiler room in your school and talk to the janitor about how it works.	c. Observing Causes Inferring Effects	c. Science	c.	
	d. Discuss meaning of the term "pounds per square inch" and provide exercises in finding "pounds per square inch."	d. Recalling Ordering Differences Similarities Concluding			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
38. Continued	Related Careers: Mining occupations, hydroelectric plant workers, electrical engineers, boiler operator, cost analyst.				
39. Students will describe the purpose of the editorial page in a newspaper.	a. Study the various sections of a newspaper. Discuss the purpose of the editorial page.	a. Observing Similarities Differences	a. Language Arts		
	b. Find examples of effective letters to the editor that get a point of view across to the reader.	b. Making Choices Similarities Differences	b. Language Arts		b.
	c. Write letters to the editor of a newspaper concerning the energy crisis.	c. Ordering Making Choices	c. Language Arts		c.
	Related Careers: Newspaper editor, pressmen and assistants.				
40. Students will list ways to cut down on fuel waste.	a. Discuss how we could ease our energy crisis.	a. Recalling Causes Inferring Effects	a. Language Arts		
	b. Have a speaker explain and answer prepared questions on how insulation can reduce heat waste.	b. Recalling Questioning	b. Social Studies		
	c. Have students make poster encouraging others to conserve energy (using methods discussed above) and display throughout the school and/or community.	c. Recalling	c. Art Social Studies	c.	c.
	Related Careers: Car manufacturers, designers, building contractors, insulators, appliance manufacturer, research personnel.				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
41. Based upon prior discussions and activities students will provide written and verbal definition of the terms "fuel," "energy," and "crisis."	a. Compare student's definition of fuel, energy, crisis, with those found in dictionary or other reference.	a. Recalling Similarities Differences Concluding	a. Language Arts Social Studies Science		
	b. Find synonyms of fuel, energy and crisis in a thesaurus.	b. Recalling Similarities Differences	b. Language Arts		
	c. Have students make an original free-form drawing of their concept of fuel, energy, crisis.	c. Recalling Making Choices Inferring Feelings	c. Art Language Arts Social Studies	c.	c.
	d. Role-play crisis situations.	d. Recalling Making Choices Inferring Feelings	d. Language Arts Social Studies	d.	d.
	Related Careers: Refer to all careers listed throughout this unit.				
42. Each student will write a commercial for a consumer fuel company.	a. Prepare several 10-second commercials for presentation on tape or before the class.	a. Recalling Making Choices	a. Language Arts	a.	a.
	b. Critique and discuss commercials presently appearing in the media. (Discuss propaganda, false advertising.)	b. Observing Recalling Making Choices Concluding	b. Language Arts Social Studies		
	c. Review the elements of a good paragraph by reading several given models.	c.	c. Language Arts		
	Related Careers: Advertising consultant, commercial artist.				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
43. Given the article "This Energy Crisis - Is It Real?", appearing in October 1972 issue of The Changing Times, The Kiplings Service, Vol. XXVI, No. 10, pupils will summarize the main idea.	a. After viewing filmstrip Digging for Facts and movies "Your Communication Skills: Reading and Your Study Skills: Using Reference Materials, have students bring in articles on the energy crisis and environmental control. Discuss how to find the main idea.	a. Observing Recalling	a. Language Arts		
	b. Teach students how to use the Readers Guide to find current articles on the energy crisis. Related Careers: Writer, copy reader, magazine publisher.	b. Observing Differences Similarities Making Choices	b. Language Arts Social Studies		

Activities

1. The class will write a news release on their field trip for printing (using newspaper format).

2. Each student will be able to read and interpret a gas and electric meter.

3. Keep daily record of gas or electric meter readings for one week and compute increase for that week.

4. Have better students research what solar energy is and how it can be used.

5. Have students grade and explain the difference between the various types of coal.

6. Student will research the duties of a sample of the following careers.

   a. Petroleum geologist: studies the surface and subsurface composition of the earth.

   b. Paleontologist: studies fossil remains in the earth to locate oil bearing sands.

   c. Mineralogist: studies physical and chemical properties of mineral and rock samples.

   d. Shothole drillers and helpers: operate portable drilling rigs to make holes into which explosives are placed.

   e. Rig builders and helpers: install drilling rigs to support the machinery and equipment which raise and lower the drilling tools.

   f. Derrickmen: works on small platform high on rig whenever running in or pulling pipe from a drilled hole.

   g. Petroleum engineers: plan and supervise the operation and maintenance of wells.

   h. Pumpers (or roustabouts): operate and maintain motors, pumps, and other equipment to force an artificial flow of oil from wells.

   i. Welders: maintain and repair petroleum drilling machinery.

   j. Carpenters:

   k. Electricians: install and maintain electrical machinery

   l. Machinists: install and repair petroleum drilling machinists.

   m. Stillmen (or coking or cracking operator): responsible for efficient operation or processing units of crude oil into usable products.

   n. Pumpmen: maintain and operate power-driven pumps which circulate petroleum products, chemicals, and water through processing units.

   o. Treaters: Operate equipment to remove impurities from gasoline, oil, and other petroleum products.

   p. Refinery mechanics: maintenance workers who often have combined skills in keeping refining equipment in good working order.

   q. Chemists and laboratory technicians: control quality of petroleum products by making tests and analysis.

r. Administrative personnel: supervisors of the entire refining operation including hiring and firing of others.

s. Typists, stenographers, secretaries, bookkeepers: clerical workers who work in office jobs related to petroleum refining.

t. Systems analysts, key punchers: Computer workers necessary to the petroleum refining process.

u. Gasoline service station attendants: service cars, pumps gasoline, cleans windshields and provides additional services.

v. Wholesale trade salesworkers: representatives of companies who play a big role in getting goods from factories to the consumers.

w. Manufacturers' salesmen who represent their company's product to other large companies or institutions.

x. Cooperative extension service workers: those engaged in educational work in agriculture, home economics, youth activities, and community resource development.

y. Soil scientists: study the physical, chemical and biological, characteristics and behavior of soil.

z. Soil conservationists: supply farmers, ranchers and other with technical assistance for soil and water conservation.

aa. Agricultural economist: deal with problems related to production, financing, pricing, and marketing of farm products.

ab. Agricultural engineers: develop new and improved farm machines and work on irrigation systems, flood prevention, and other technical aspects of farming.

ac. Agronomists: concerned with growing, breeding, and improving field crops.

ad. Animal physiologists and animal husbandmen: research environmental influences upon, breeding of, growth of, and nutrition and physiology of livestock.

ae. Veterinarians: inspect and treat livestock to control disease.

af. Geneticists: develop strains, breeds, and varieties of better plants and animals.

ag. Plant pest control inspectors: supervise and perform professional and scientific work in enforcing plant quarantine and pest control laws.

ah. Entomologists.

ai. Human nutritionists.

aj. Electrical engineers.

ak. Chemical engineers.

al. Industrial engineers.

am. Statisticians.

an. Environomental scientists.

ao. Foremen

ap. Electric power plant administrators and clerks.

aq. Electric power plant maintenance workers.

ar. Boiler operators.

as. Turbine operators.

at. Auxiliary equipment operators.

au. Switchboard operators.

av. Watch engineers.

aw. Load dispatchers.

ax. Subutation operators.

ay. Linemen.

az. Meter men.

ba. Meter readers.

bb. District representatives.

bc. Newspaper editor.

bd. Pressman.

be. Writer.

bf. Copyreader.

bg. Government positions.

bh. Broadcasting positions.

bi. Physicist.

bj. Accountant.

bk. Insulation installer.

bl. Public relations man.

bm. Store manager.

bn. Coal miner.

bo. Nuclear energy plant worker.

bp. Lumberjack.

bq. Heating and air conditioning repairman.

br. Automobile engine designers.

bs. Professional drivers.

bt. Census takers and poll takers.

bu. Archeologists.

bv. Printer.

bw. Anthropologist.

bx. Pictographers

by. Technical Artist.

bz. Museum curator and staff.

ca. Sociologist.

cb. Historians.

Resources

Filmstrips
- *Whaling*
- *Oil Wealth from the Ground*
- *Coal and Iron Workers*
- *Oil Workers*
- *Petroleum in Today's Living*
- *Oil: From Earth To You*
- *How Man Conserves the Soil, Light*
- *Electricity and Heat*
- *Using Atomic Energy*
- *Energy*
- *Whats An Atom*
- *Electricity*
- *Chemical Change*
- *Light*
- *Building An Electric Generator*
- *Electricity in Circuits*
- *Transformers*
- *Light, Electricity and Heat*
- *Heat Series*
- *Energy*
- *What is Electricity?*
- *What is Energy?*
- *Electrical Circuits*
- *Heat and How It Is Measured*

Language Arts

Digging for Facts
Building Reports
Finishing Reports
Title and Opening Sentence
Body of Composition
Body of Closing Sentence
Revising and Final Editing

Films
- *Introducing Atoms and Nuclear Energy*
- *The Atomic Dilemma*
- *Fuels: Their Nature and Use*
- *Factories, Mines and Waterways*
- *ABC of Internal Combustion*
- *Atomic Research: Areas and Development*
- *Birth of a Gas Station*
- *Our Friend, the Atom: Part II*
- *Principles of Electricity*

Gas Company
- *Slides and Lecture - Heat Your Home for Less*
- *Movie - The Steel Reef*
- *Filmstrip/Record - Squandered Resources*
  - *Middle East Turmoil*

Language Arts

Improve Your Oral Reports
Writing Different Kinds of Letters
Your Communications Skills - Speaking
Listening
Writing
Reading
Your Study Skills: Doing An Assignment
Your Study Skills: Using Reference Materials
Your Study Skills: Taking Notes
Effective Writing: Revise and Improve
How to Read Newspapers
Writing a Good Paragraph

Math

Graphs: Understanding and Using Them
Percent: How and Why
Brushing Up on Division
Brushing Up on Multiplication
Electricity: How it Is Generated
Electricity: Principles of Safety
Electrons and Electronics
Introduction to Electricity
Matter and Energy
The Story of Electricity - The Greeks to Franklin
Chemical Changes All About Us
Electricity from Chemicals
Electricity All About Us
Energy and its Forms

Atomic Energy
Energy From the Sun
How the Body Uses Energy
The Nuclear Reactor
Introducing Atoms and Nuclear Energy
The Sun and Mr. Norris

Pamphlets

"Science in the Petroleum Industry"
American Petroleum Institute
1271 Avenue of the Americas
New York, 20, New York

"Facts About Oil"
American Petroleum Institute
1271 Avenue of the Americas
New York, New York 10020

"Penetrating New Frontiers with Mineral Engineering"
Society of Mining Engineers of America
Institute of Mining, Metallurgical and Petroleum Engineers, Inc.
345 East 47th Street
New York, New York 10017

"Careers in Petroleum Engineering"
Society of Petroleum Engineers of AIM
6200 North Central Expressway
Dallas, Texas 75206

"Your Unlimited Opportunities in the
L. P. - Gas Industry"
The Association of Young Gassers, Inc.
Wyncote House
Wyncote, Pennsylvania

"Mining Engineering"
The Colorado School of Mines
Golden, Colorado 80401

"Petroleum Engineers"
The Colorado School of Mines
Golden, Colorado 80401

"Books on Admission"
The Colorado School of Mines
In files under #622

American Petroleum Institute
1801 K Street, Northwest
Washington, D. C. 20006

"Engineering Careers in the Coal Industry"
National Coal Association
Coal Building, 1130 Seventeenth St.
Washington, D. C. 20036

"Mining Engineering"
Chairman, Department of Mining, Petroleum
and Geological Engineering
University of Missouri, Rolla
Rolla, Missouri 65401

Books

Underground Riches: The Story of Mining
Walter Bueha, William Morrow and
Co., 1958

The Wonder of Heat Energy
Hy Ruchlis, Harper and Row, 1961

Electricity: The Story of Power
Arnold Mandelbaum, G. P. Putnam's
Sons, 1960.

The Deepest Hole in the World
Louis Wolfe, G. P. Putnam's Sons, 1964

A Job With A Future In The Petroleum
Industry
Phillip T. Dronting and Jim Mayes,
Grosset and Dunlap, 1969

Electric Power in America
Robert McCraig, G. P. Putnam's Sons,
1970

Career Opportunities - Technicians
Ferguson Doubleday

The How and Why Book of Atomic Energy
Donald Barr, Grossett and Dunlap

Atomic Energy
Matthew Gaines, Grossett and Dunlap

Coal, Steel, Atoms and Trade
Richard Strauss, Coward-MCann

About Oil
Eleanor Phillips, Melmont

Oil . . . Todays Black Magic
Walter Buehr, Morrow

Magic of Steel and Oil
Robert Webb, Grossett and Dunlap

Cimarron (Petroleum Industry and Trade)
Edna Ferber, Grossett and Dunlap

The Great Heritage
Katherine Shippen, Viking

Information

Edison Electric Institute
750 3rd Ave.
New York, New York 10017

International Brotherhood of Electrical Workers
1200 15th Street, N. W.
Washington, D. C. 20005

Utility Workers Union of America
1875 Connecticut Avenue, N. W.
Washington, D. C. 20006

National Petroleum Refiners Association
1725 DeSales Street, N. W.
Washington, D. C. 20036

American Institute of Mining, Metallurgical and Petroleum Engineers
345 East 47th Street
New York, New York 10017

Career Briefs

"Gas Distribution Occupations"
Chronicle Publishers

"Petroleum Products Manufacturing Occupations"
Chronicle Publishers

"Mining Engineer"
Chronicle Publishing

"Mining and Quarrying Industry"
Chronicle Publishing

"Petroleum Engineer"
Chronicle Publishing

Career Kits

Careers, Inc., Largo, Florida 33540
- Petroleum Engineer #622
- Mining Engineer
- Coal Engineer

SOUTH-WESTERN CITY SCHOOLS

Your Community: Past, Present, and Future

This unit exemplifies integration of all subject areas with careers. It is especially suitable for a team teaching organization but is not limited to this type of organization.

1. This unit is designed to be utilized fully or partially at the teacher's discretion.
2. The intention of the authors is for phase planners to choose only those objectives that they wish to meet.
3. Which and how many objectives will be taught and which suggested implementation activities will be used are at the discretion of the phase planners.
4. Evaluation will be made by pre-testing and post-testing only those objectives chosen by the phase.
5. The list of suggested test items is included solely as a teacher resource, not as a test for the students.
6. The phase may re-word the test questions to meet the needs of their students as long as the new test questions keep with the guidelines of the objective. (Note Math Teachers: It is up to you to decide the degree of difficulty that you wish to use and substitute the appropriate numbers.)
7. Answers for all test items are included after each test item.
8. Analysis of the pre-test and post-test can be done by simply taking the average of the student's scores within the phase as opposed to an item by item analysis. (Send these pre and post-test results to Don Miller along with the "Numbers" of the objectives that were used, i.e., "We used objectives 1, 3, 5, 6, 7, and the average score was 57% correct.")
9. Any deletions or additions that the teachers wish to make to the list of activities is certainly in the best interest of student learning in this unit.
10. THIS UNIT IS MEANT TO BE BROAD AND FLEXIBLE--IMPLEMENT IT TO MEET THE NEEDS OF YOUR PHASE.

GOAL: To clarify and extend the students' concept of their local community--Past, Present and Future

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-TION	AFFECTIVE RELATION-TION
I. The students will write and present a skit based on the history of their community.	a. Read stories of pioneer life in your community and state.	a. Recall	a. Language Arts		
	b. Look at pictures, filmstrips and movies depicting pioneer life and draw sketches of costumes and settings for a skit of historical interest.	b. Recall Differences Similarities			
Career Clusters: 7, 4, 13, 9 Related Careers: Artist Clothes Designer Playwright Choreographer Actor Play Director Prompter Stand-in Sound Effects Person Stage Director Wardrobe Mistress Historian	c. Write a script for a skit.	c. Recall Differences Similarities Cause Effect Making Choices			c.
	d. List five types of work involved in the presentation of a play before an audience.	d. Observe Recall			
	e. Define these words or terms-- Actor Choreographer Scene Author Director	e. Recall			
Test Question and T.C.C. - What is the job of a prompter in the presentation of a skit?					
II. The student will list three listening skills.	a. Have a guest speaker to talk about community problems or an item of historical significance and have students write a summary of the talk.	a. Recall Differences Similarities Cause Effect Making Choices	a. Language Arts		a.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
II. Continued. Career Clusters: 3, 7 Related Careers: Publisher Audiovisual Director Reporter	b. Students will listen to a tape of a previously recorded talk on a subject pertaining to a community and in an oral presentation give the main idea and three supporting details of the tape.	b. Recall			
	c. Find items of historical importance from newspapers, brochures or magazines which give historical information of your community and present them to the class in an oral report.	c. Observe Recall Differences Similarities Cause Effect Making Choices			c.

Test Question - List three listening skills.

T.C.C. - What skills does a newspaper reporter need to effectively report events at a press conference?

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
III. Students will list six types of health care personnel and facilities in their community. Career Clusters: 8, 14 Related Careers: Nursing Doctors Nursing Home Director Artist Social Worker Emergency Rescue Men or Women Mental Health Director Psychologist Psychiatrist	a. Take a field trip to a health facility such as a nursing home.	a. Observe Recall	a. Teen Impact Social Studies		
	b. Use a telephone book for information and draw a chart to represent health facilities of the community.	b. Observe Recall Ordering			
	c. Make a survey of available health facilities of community.	c. Observe Recall Ordering			
	d. Have a member of the Emergency Squad talk to class about emergency procedure.	d. Observe Questioning			
	e. Use a filmstrip on the subject of mental health.	e. Observe Recall			

T.C.C. - A psychologist is a medical doctor that treats mental patients.
Test Question - Student will list six types of health care facilities.
Answers: T.C.C. - False. — Test Question — Teacher's can judge correctness of answer.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IV. The student will list four ways to involve new citizens.	a. Poll the neighborhood to show how many families have moved to this community within the last five years.	a. Observe Ordering	a. Team Impact Social Studies		
	b. List organizations that help to involve families in community life such as P.T.A.	b. Recall Differences Similarities Ordering			
Career Clusters: 13, 9, 14, 3 Related Careers: Hostess School Counselor Actor Social Worker Pollster	c. Role-playing to show problems of a new student in a school.	c. Observe Recall Differences Similarities Cause Effect			c.
	d. Make a report on the job of a school counselor or social worker	d. Recall			

Test Question - List four ways to involve new citizens in the community.

T.C.C. - Match following jobs with description: (a.) priest. (b.) school counselor. (c.) newspaper publisher. (d.) Welcome Wagon Representative 1. person who helps students with their problems - 2. person who directs religious activities - 3. a person who visits a new family of the community and presents them with gifts from merchants - 4. a person who publishes news of a community.

Answers: Test - church membership, welcome wagon activities, P.T.A. membership, enlistment of people in political parties.
T.C.C. - 1-b, 2-a, 3-d, 4-c.

V. Given the number of new houses in the community and the average number of schoolage children in each household the students will compute the number of new students to be added to school rolls.	a. Graph figures from the problem in the objective.	a. Observe Recall Ordering	a. Math Social Studies		
	b. A real estate man from the community talks to the class about the amount of new homes in their community.	b. Observe Recall Cause Effect Questioning Making Choices			b.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
V. Continued. Correlates with SWMSC Objective #22	c. An architect discusses changes in architecture of buildings in our community.	c. Observe Recall Differences Similarities Cause Effect			c.
Career Clusters: 5, 14, 2 Related Careers: Real Estate Salesman Architect Any career in building industry Map Maker School Administrator in charge of projecting school enrollment	d. The students map a new section of their community and mark all new buildings in way suggested by class.	d. Recall			

T.C.C. - Name ten occupations that are involved in the planning of a new housing development in a community.

VI. Students will explain the change in educational facilities of his community in the past one hundred years.	a. Students will draw a map to scale of the present school district.	a. Recall Ordering	a. Social Studies Math Language Arts		
	b. A speaker from the school board or administrative staff will be invited to talk to the group.	b. Observe Recall Questioning			
Correlates with SWMSC Obj. #55 and #56	c. The students will study brochures of his school district to obtain knowledge of changes and growth in the system.	c. Observe Recall Cause Effect			c.
Career Clusters: 3, 14, 13, 7	d. Former students can be interviewed on changes in our school system.	d. Observe Recall Differences Similarities			
Related Careers: Public Speaker Teachers School Administrators Media Consultants Maintenance Engineer Custodian	e. A field trip to an elementary, vocational middle school or high school can be made.	e. Observe Recall Differences Similarities			

T.C.C. - Put one check mark in front of all jobs found in a present day school system, and two checks in front of those jobs found in a pioneer school. ( ) Teacher ( ) Nurse ( ) Dietician ( ) Surgeon ( ) Minister ( ) Secretary
Suggested answer - (xx) Teacher (x) Nurse (x) Dietician ( ) Surgeon ( ) Minister (x) Secretary

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VII. Students will list ten occupations or jobs of pioneer people and ten occupations of present-day citizens of their community.	a. Have each student tell the specific job that his father or mother does.	a. Recall Differences Similarities	a. Social Studies		
	b. Present films of pioneer days and have children record jobs that they observe.	b. Recall Ordering			
Career Clusters: 1 - 15 could apply	c. Take a bus tour of community and direct attention to things suggesting jobs. This could also be done on a short walk.	c. Observe Recall Cause Effect Making Choices			c.
Related Careers: Any career	d. Have small group read a story of current or pioneer times and discuss career that they observed in oral presentation to class.	d. Recall Differences Similarities Cause Effect			d.

T.C.C. - List ten occupations of pioneers and ten of present-day citizens.

Possible answer - Pioneer - Weaving, farming, preaching, blacksmiths, carpenters, teachers, hunters, law officers, surveyors, or any other answer correct in teacher's estimation.

Present - Lawyer, minister, doctor, police, teacher, technician, druggist, printers, proof readers, farmers, and so forth.

VIII. Each student will be able to list three climatic periods which have effected the lives of animals and human life in this area.	a. Construct a model of climatic periods.	a. Recall Differences Similarities Cause Effect	a. Science		a.
Career Clusters: 1, 11	b. Draw a mural of the climatic periods including sketches of human and animal life.	b. Recall Differences Similarities Cause Effect			b.
Related Careers: Archeologist Botanist Zoologist	c. Draw a map of Ohio showing the extent of glacier movement.	c. Recall			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
Related Careers: Continued Paleontologist Meteorologist Assistants to Archeologists Anthropologist Climatologist Museum Curator Marine Biologist	d. Students will write a one-page report on the life of an archeologist, a botanist or a zoologist, including educational requirements of each career.	d. Recall			
	e. A group of students will design a bulletin board illustrating the climatic periods.	e. Recall Differences Similarities Cause Effect			e.

Test Question - List three climatic periods which have effected your community or area.

T.C.C. - Check the career or careers which would be involved in finding out the number of climatic periods of your geographical area.
( ) Grocer ( ) Farmer ( ) Scientist ( ) Geologist

Possible answer - Test -

T.C.C. - Scientist, Geologist

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IX. Students will give verbal or written explanation of the change in plant and animal life in their community in the last 200 years. Career Cluster: 8, 11 Related Careers: Historian Veterinarian Anthropologist Biologist Archeologist	a. Make a time line of 200 years to show changes in animal and plant life.	a. Recall Differences Similarities Ordering Cause Effect	a. Science		a.
	b. Written or oral report on the causes of animal extinction.	b. Differences Similarities Cause Effect			b.
	c. Read of pioneer days and compare the animals and vegetation to those found in your community today.	c. Observe Recall Differences Similarities Cause Effect			c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IX. Continued.	d. Use film or filmstrips of pioneer days and have a round table discussion of animal and vegetable life, comparing them to present animal and plant life.	d. Observe Recall Differences Similarities			d.

Test Question - Name three animals and three plants that could be found in our community 200 years ago.
T.C.C. - True or False - Indians farmed the land before the coming of the white man.

Possible Answers - Test: Bears, foxes, horses - corn, beans, pumpkin (or any that the teacher counts correct)
T.C.C. - True

PRESENT

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
I. The student will compute the percent of population growth in the community given population figures from the 1900 and 1970 census.	a. Discuss population growth based on movement and birth rate.	a. Recall Differences Similarities Concluding	a. Math Social Studies		
Correlates with SWMSC: Obj. #48	b. Discuss and work practice problems on percentage of growth.	b. Recall			
Career Clusters: 2, 5, 14 Related Careers: Statisticians Census Takers Mathematicians City Planner Architect Librarians Data Processors	c. Graph the 1900 and 1970 census figures on a line graph. Try to infer the six 10-year census figures from this graph and then compare them with actual population census figures.	c. Recall Differences Similarities Ordering Cause Effect Anticipating Concluding			c.

T.C.C. True or False--A city planner would use the percentage growth figures to plan for new community needs in future years.

Answer - True

II. The students will, given statistics from questionnaires, compute percentage figures of total community for each appropriate area as indicated by the surveys collected.	a. Students will discuss percentage figures and their use with statistics.	a. Recall Differences Similarities	a. Math Language Arts Social Studies		
	b. The students will graph (using bar, line or circle graphs) sample problems.	b. Recall Differences Similarities Ordering			
Correlates with SWMSC: Obj. #48	c. The students will complete and discuss graphs of the surveys collected as a large group project.	c. Recall Differences Similarities Ordering Cause Effect			c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
II. Continued. Career Clusters: 2, 3, 5, 14 Related Careers: Statisticians City Planners Data Processors Clerks Public Relations Workers Technical Writers Draftsman	d. The students will discuss the future of the community based on the results of the poll.	d. Recall Differences Similarities Cause Effect Anticipating			d.

T.C.C. True or False--Statisticians use public opinion surveys and questionnaires along with population statistics to tabulate the need for new business and recreational facilities in growing communities.

Answer - True

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
III. The student will list three kinds of community information that can be gained from a questionnaire.	a. Students will discuss questions found in sample survey of a metropolitan community (see kit).	a. Observe Recall Differences Similarities Cause Effect	a. Language Arts		
Career Clusters: 1 - 15 could apply	b. Students will look at several kinds of questionnaires and discuss uses in a community.	b. Observe Differences Similarities			
Related Careers: All careers could be covered here dependent on information obtained.	c. Write a survey and print enough copies to poll five times the number of students in the program.	c. Recall			
	d. Distribute the surveys to neighborhoods in BMS area.	d. Observe Recall			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
III. Continued.	e. Collect and tabulate results of surveys.	e. Different Similarities Ordering Cause Effect			

Test Question - List 3 kinds of information that could be gained from community questionnaires.

T.C.C. - A survey which counts and locates fire hydrants in a community would be of interest to ________.
A) Dog lovers B) Police Chief C) Fire Marshall D) Insurance Agent E) A and C F) C and D G) None of these.

Suggested Answers - Test: A) Number of Churches; B) Need for Recreation Facilities; C) Need for New Business
T.C.C.: - F

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IV. The student will list three purposes of a Chamber of Commerce. Career Clusters: 2, 9, 14, 3 Related Careers: Public Relations Workers Publishers Businessmen Politicians Secretaries Clerks Business Administrators Motel Managers Amusement Businesses Recreational Personnel	a. Write business letters, using correct form, to Chambers of Commerce across the nation (see kit).	a. Recall Cause Effect Questioning	a. Social Studies Language Arts		a.
	b. Discuss the results of those letters based on similarities and differences in the replies received.	b. Recall Differences Similarities Cause Effect			
	c. Draw some generalizations about Chambers of Commerce from the discussion in b.	c. Concluding Generalizing			
	d. Have speakers from local Chambers of Commerce explain local agencies.	d. Observe Recall Questioning			
	e. Discuss need for Chamber of Commerce in local communities.	e. Differences Similarities Cause Effect Concluding			e.

Test Question - List three purposes of a Chamber of Commerce.

T.C.C. True or False - A lawyer could be a member of the Chamber of Commerce in his community.

Suggested Answers: Test - 1. To encourage new business to move into community.
2. Educate public about community problems.
3. Promote any activity which will bring consumers to the community.

T.C.C. - True

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
V. The student will list and explain the industries found in his community.	a. Discuss industries in the community.	a. Recall Differences Similarities	a. Social Studies		
Career Clusters: 1 - 15 could apply	b. Discuss the location of business to population centers.	b. Recall Differences Similarities Ordering			
Related Careers: Any careers related to the industries found in the community.	c. Infer from current location of businesses possible new sites for industries based on population and facilities.	c. Recall Differences Similarities Cause Effect			c.

T.C.C. - Of the following industries, check five which can be found in your community.

(A) Themostat Manufacturing Company
(B) General Motors Plant
(C) Westinghouse
(D) Western Electric
(E) Ford Motor Company
(F) Galion Power Shovel
(G) Publisher of Ohio Mason
(H) Holiday Inns

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VI. The student will list and explain government positions and the duties of officials.	a. Discuss the organization of city governments. 1) city manager 2) mayor-council 3) mayor	a. Recall Differences Similarities	a. Social Studies		
Career Clusters: 14, 3, 2	b. Find out the names of local officials and the offices they hold.	b. Recall			
Related Careers: Public Service Workers Government Officials Lobbyists Lawyers Judges Law Enforcement Social Workers Education	c. Discuss city or local government positions as careers. d. Listen to career tapes dealing with public officials (see kits).	c. Recall Differences Similarities d. Recall			

NOTES:

T.C.C. - Match duty with office:

1) Mayor
2) Councilman
3) City Manager
4) Zoning Commissioner
5) Police Chief

A) official who regulates the placement of homes and industries
B) Appointed executive official usually hired by council
C) elected executive of city government
D) elected representative of people by geographical area
E) appointed law enforcement officer

Answers: 1. C, 2. D, 3. B, 4. A, 5. E

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VII. The students will write the definition or description of a planned city and list two advantages of pre-planning.	a. Lesson on dictionary skills and use of encyclopedia.	a. Recall	a. Language Arts Social Studies Industrial Arts		
	b. Discussion of problems in area and how they could be improved.	b. Recall Differences Similarities Cause Effect Concluding			b.
Career Clusters: 2, 5, 14	c. Invite a city planner to talk about zoning problems faced through lack of planning.	c. Cause Effect Questioning			c.
Related Careers: City Planner Architect Engineer	d. Discuss personal problems which the students have faced because of lack of planning. Have each student write about one such problem.	d. Recall Cause Effect Concluding			d.
	e. Play a simulation game where one group of students is given a topic ahead of time and asked to perform a skit and the other group performs impromptu. Compare the results.	e. Recall Differences Similarities Cause Effect			

T.C.C. - How would a city planner describe a planned city? What would be two of its advantages?

Suggested Answers: Suited to the needs of the people who live there; planned and built before anyone moves in; all persons living close to work, school and other necessary facilities.
Advantages - Would be pollution free, good transportation system, no slum areas, recreational facilities, choice of home style.

VIII. The students will draw maps and models with a given equivalency scale with 80% accuracy.	a. Have students bring in scale models of various things and discuss how these were made to scale.	a. Recall Differences Similarities Cause Effect	a. Math		a.

[illegible]TIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
[illegible]tinued. Correlates with SWMSC: Obj. #71 Career Clusters: 3, 7, 14 Related Careers: Cartographer Architect Designer Engineer City Planner Mathematician Industrial Designer Industrial Artist Surveyor	b. Have several students take the dimensions of his own house or car, then change these measurements to 1/10 their size. c. Discuss why it is necessary for an architect, an engineer, or a city planner to be able to draw things to scale. d. Practice division for scaling down numbers or multiplication of fractions.	b. Recall Ordering c. Recall Effect d. Recall Ordering			c.

T.C.C. - Using a scale of 1 inch = 20 yards, draw a football field 100 yards long and 40 yards wide.

Answer: 5 inches by 2 inches

IX. The students will write equivalent measurements for inches, feet, yards, rods, and miles. Correlates with SWMSC: Obj. #64, #65, #67 Career Clusters: 5, 14 Related Careers: Bureau of Standards Surveyor Designer Architect	a. Give each student a piece of paper one inch long, one foot long, and one yard long and allow them to use these to determine the comparison between the three. b. Show the filmstrip on distance measurements. c. Take a one-mile hike. Have each student describe one mile and then learn how many feet and yards in a mile.	a. Observing Recall Ordering b. Observing Recall c. Recall Difference Similarities Ordering	a. Math		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IX. Continued.	d. Do worksheet on which students must change these measurements.	d. Recall Ordering			
	e. Discuss comparisons with metric system.	e. Recall Differences Similarities			

T.C.C. - Pretend you are an employee of the Bureau of Standards and fill in these measurements with the correct answers:

1 yd. = 3 ft.
1 ft. = 12 in.
1 yd. = 36 in.

1 mile = 5,280 ft.
1 mile = 1,760 yd.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
X. The student will write business letters to planned communities asking for information and plans.	a. Lesson on how to write a business letter.	a. Observe Recall	a. Language Arts		
	b. Arrange a field trip to a planned community and make a videotape.	b. Observe Recall Questioning			
Career Clusters: 2, 14	c. Read the article "Wondrous Walden" in the American Home Magazine, February, 1973.	c. Recall			
Related Careers: Secretary City Planner Chamber of Commerce Employees	d. When information is received, discuss differences, similarities of each community.	d. Recall Differences Similarities Cause Effect Concluding			d.
	e. Have students list ways of changing each plan to improve it.	e. Recall Anticipating Cause Effect			

T.C.C. - Show the form a secretary would use to write a business letter from Brookpark Middle School to The Chamber of Commerce, Washington, D.C., inquiring for maps and plans of the city and information on the architects.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XI. The students will list ten careers involved in planning and building a planned city. Career Clusters: 1, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15 Related Careers: City Planner Architect, Surveyor City Manager Construction Worker Environmental Control Specialist Designer Transportation Manager Industrial Consultant Housewife Zoning Agent Educator City Parks and Recreation Planner	a. Let students investigate the careers section of the IMC to find these careers.	a. Recall	a. Social Studies Language Arts		
	b. Discuss what steps need to be taken to plan a city and who would be involved.	b. Recall Cause Effect Ordering			
	c. Make different lists of careers in your community having to do with planning, services, business.	c. Recall Questioning			
	d. Have each student write about one career having to do with planning and explain to the class what this person does.	d. Recall Differences Similarities Cause Effect Concluding			
	e. Have each student assume one of these planning careers and form groups to begin planning their community.	e. Recall Ordering Anticipating			

T.C.C. - If you were a city manager in charge of planning a community, list ten career persons you might ask to help you.

Suggested answer: City planner, architect, surveyor, construction supervisor, environmental control specialist, designer, transportation manager, industrial consultant, housewife, zoning agent, realtor, educator, parks and recreation planner, water and sanitation supervisor, landscape architect, city engineer.

XII. The students will name 5 ways of making their planned community ecologically safe and well-balanced. Career Clusters: 5, 6, 12, 1	a. Students can read and discuss the articles from the American Home, "A Better Use of Our Lovely Land".	a. Recall	a. Science		
	b. Students can play Coca Cola Ecology game.	b. Recall			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XII. Continued. Related Careers: Environmental Control Specialist Ecologist Conservationist City Planner Industrial Managers	c. Students can list problems with ecology and the way things are constructed in their own area.	c. Recall Differences Similarities Cause Effect			c.
	d. A speaker from the trash and sanitation or environmental control department could be asked to speak.	d. Recall Questioning			

T.C.C. - List five ways an ecologist might suggest to make a planned community more ecologically well-balanced.

Suggested Answers: Better use of present terrain, conservation of vegetation, better sewage disposal system, more industrial controls, better use of mass transportation, shorter commuting distance to work, requirement of recycling cans, bottles and papers.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XIII. After being divided into groups, the students will write a one-page description of their proposed planned community including at least ten changes from their present community. Career Clusters 1, 6, 14	a. Students will first have a discussion about the type of community they want.	a. Recall Differences Similarities Cause Effect Concluding	a. Language Arts Social Studies Industrial Arts		a.
	b. Have students discuss different types of available housing - condominiums, apartments, doubles, high rise office-apartments, single family dwellings.	b. Differences Similarities Cause Effect			b.
Related Careers: City Planner Developer Real Estate Agent Architect Surveyor Conservation or Environmental Specialist	c. Students can make lists of all the things they need to provide to make living comfortable for the residents.	c. Recall			
	d. Invite parents or community people who have jobs in recreation, transportation, business, or services to talk about the importance and function of these areas in the community.	d. Recall Differences Similarities Cause Effect Questioning			

Items 13, 14 and 15 will be evaluated by means of a discussion held prior to teaching and activities and an evaluation of the finished product as the objective is completed.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
XIV. The students will draw sketches of their planned community to scale.	a. The students must discuss the best location for various elements of their community.	a. Recall Cause Effect Differences Similarities Concluding	a. Art Industrial Arts Math		a.
Correlates with SWMSC: Obj. #69 and #71	b. They must decide on a scale to use by looking at architects' drawings.	b. Cause Effect Concluding			b.
Career Clusters: 7, 2, 10	c. They could practice scale drawing with a plan of their house or their block.	c. Recall Differences Similiarities Ordering			
Related Careers: Artist Landscape Architect Surveyor Industrial Artist	d. Several lessons on sketching and drawing plans will be held in art, math, or industrial arts.	d. Recall			
	e. An architect could be brought in as a guest speaker.	e. Recall Questioning			
XV. Given the necessary materials, the students will construct a scale-model planned community.	a. A construction worker, an engineer, or a developer could be brought in as a guest speaker.	a. Observe Questioning	a. Industrial Arts Math		
Correlates with SWMSC: Obj. #69 and #71	b. The materials can be discussed and it can be decided which are most suitable.	b. Observe Recall Cause Effect Making Choices			
Career Clusters: 2, 5, 10, 14	c. The group should divide the work with some doing construction and others landscaping.	c. Observe Making Choices			
Related Careers: Industrial Artist Construction Worker Transportation Consultant Architect City Planner	d. The scales can be reviewed and determined in student's math class.	d. Recall Making Choices			

FUTURE

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
I. Students will describe two careers associated with what they are currently studying in science (or math, social studies, language arts, art and industrial arts).	a. Discussion of jobs related to subject area.	a. Recall Differences Similarities	a. Science Math Social Studies Language Arts Art Industrial Arts		
Career Clusters: 2, 4, 7, 12	b. Students may research related jobs and report to class.*	b. Recall Making Choices			
Related Careers: Secretary Accountant Electronic Computer Personnel Clerks Cashiers Publishing Broadcast Audiovisual Artist Advertising Education Scientist	c. Have parents and people from the community as guest speakers.	c. Observe Recall Making choices			
	d. Game - "Name That Job" or "What's My Line" *Refer to student bibliography.	d. Recall			
T.C.C. - Name and describe two careers associated with what you are currently studying in science.					
II. Students will name three kinds of jobs that will still be needed 20 years from now. Career Clusters: 2, 3, 5, 6, 8, 9, 11	a. Discussion of jobs that will be needed and why -computer service personnel -architects -broadcasting personnel -advertising personnel	a. Recall Differences Similarities Cause Effect Concluding Anticipating	a. Science Math Social Studies Language Arts Art Industrial Arts		a.
	b. Talk about jobs that may be changed in some way because machines will do most of the work.	b. Recall Cause Effect Anticipating			b.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
II. Continued. Related Careers: Computer service personnel Broadcasting and advertising personnel Architects Scientists Conservationists Recreation Marine Scientists Repairmen	c. Have parents and people from the community as guest speakers on their jobs.	c. Recall Observe Questioning Making Choices			c.
	d. Pantomine jobs. Play "What's My Line."	d. Observe Recall Differences Similarities Making Choices			
	e. Wide reading on careers. Refer to student bibliography	e. Observe			
T.C.C. - Name three kinds of jobs that will still be needed 20 years from now, and state why you think they will still be needed.					
III. Students will write future autobiographies in which they picture themselves 10 (or 20) years from now, and will describe the jobs they will have then. Career Clusters: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 Related Careers: All careers	a. Class discussion on the papers. Compare different assumptions students have made.	a. Recall Differences Similarities Cause Effect Anticipating	a. Language Arts		
	b. Show movie Tomorrow Is Now and discuss.	b. Observe			
	c. Wide reading on careers. Refer to student bibliography.	c. Observe			

T.C.C. - Describe the job you will have 10 years from now.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
IV. Students will briefly describe how the inhabitants of the earth are divided by their position in time, and thus how their lives and jobs differ. Career Clusters: 1, 4, 10 Related Careers: Agriculture Manufacturing Research and Development	a. Discussion of 1. Tasadays on Island of Mindanao - still live by hunting and food-foraging, live as men did millennia ago. See teacher bibliography. 70% 2. Vast majority of people depend on agriculture, live as ancestors did. 25% 3. Industrialized society - people of present. 2-3% 4. Scientists and people within main centers of technological and cultural change (Santa Monica, California, Cambridge, Mass., New York, London, Tokyo), living life of future.	a. Recall Differences Similarities Cause Effect	a. Social Studies		
	b. Make a mural comparing and contrasting the above.	b. Differences Similarities Ordering Cause Effect			

T.C.C. - Compare and contrast jobs of cavemen, our ancestors, present-day people, and future-oriented people.

Suggested Possible Answer: - cavemen - hunting, berry picking)
ancestors - farming) both concerned with providing own food
present-day people - industrialized jobs)
future-oriented people - scientists) concerned with jobs other than provision of food

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
V. Students will prepare a creative writing paper on life in submarine communities or in outer space, and the type of jobs people will have there.	a. Teacher may read science fiction books to the students by authors such as: Arthur C. Clarke William Tenn Robert Heinlein Ray Bradbury Robert Sheckley	a. Observe Recall	a. Language Arts Science		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
V. Continued. Career Clusters: 11, 15 Related Careers: Marine Scientist Fisherman Marine Life Farmer Sponge, Seaweed Gatherers Shellfish Gathers Diver Astronauts Computer Scientists Radar Specialists Geologists	b. Students may read science fiction stories and other stories dealing with the future. Ex. Jules Verne's 20 Thousand Leagues Under the Sea	b. Observe Recall			
T.C.C. - Name two careers dealing with marine science and two careers dealing with the space program.					
VI. Student will describe in detail the job that some important person in their life holds, including the following: a) qualifications and education needed b) type of activities involved. c) how much time involved per week. d) why the person chose this job. e) why the person likes or dislikes the job. Career Clusters: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 Related Careers: All careers	a. Students interview important people in their lives and share findings with the class.	a. Observe Recall Differences Similarities Cause Effect Questioning Making Choices	a. Language Arts Science Math Social Studies Industrial Arts Art		a.
	b. Talk about interview techniques.	b. Recall Questioning	T.C.C. - Describe in detail the job that some important person in your life holds by including the following: a) qualifications and education needed b) type of activities it involves c) how much time it involves per week d) why the person chose this job e) why the person likes or dislikes the job		
	c. Wide reading on careers. - Refer to student bibliography.	c. Recall			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
VII. Students will plan a community and include the following: a) jobs people will have b) math system c) language system-codes d) educational system e) Art Career Clusters: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 Related Careers: Any careers the students choose to include	a. Groups of students will plan communities and will leave artifacts of this community to be discovered and interpreted by another group of students (treasure hunt). b. Talk about how to describe societies, i.e., in terms of food gathering, clothing, family life, shelter. c. Play game - Future by Kaiser Aluminum	a. Observe Recall Differences Similarities Anticipating b. Differences Similarities Cause Effect Concluding c. Observe Recall	a. Social Studies Language Arts Math Art		
T.C.C. - You are the designer of a community. What type of jobs would the people in your community have?					
VIII. Student will compute the probability of two brown-eyed people having a blue-eyed child. Correlates with SWCMS: Obj. #134 and #135 Career Clusters: 10 Related Careers: Statistician Logician	a. Variations such as: Given 40 test grades, the student will illustrate and explain the mean, median, and mode of the scores in a sequential order with 90% accuracy. Given the word probability and the idea of flipping the coin 100 times, the student will record the probable times the coin will turn up heads, thus establishing the probability with 90% accuracy. Given a choice of a histogram, table or graph, the student will record in an understandable form, the number of times the coin turned up heads, with 100% accuracy.	a. Differences Similarities Cause Effect Concluding	a. Math Science		a.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-TION	AFFECTIVE RELATION-TION
VIII. Continued.	b. Discussion of dominant and recessive genes.	b. Differences Similarities Cause Effect			
	c. Play the game Future by Kaiser Aluminum	c. Observe Recall			

T.C.C. - Given two brown-eyed people with a recessive blue gene, what is the probability of their having a blue-eyed child?
Answer: One chance out of four.

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Writing Different Kinds of Letters
You'll Find It in the Library
Your Communication Skills: Listening
Your Study Skills: Using Reference Materials
Graphs: Understanding and Using Them
Story of Our Number System
Measurement
What Is Science?
Man Uses and Changes the Land
Map Skills: Using Different Maps Together
Homes Around the World
Work Around the World
Westward Growth of Our Nation
Writing a Good Paragraph
Conserving Our Water Resources Today
The Story of Prehistoric Man
Writing a Report
The Metric System
Automation
Erosion - Leveling the Land
The Physical Environment
Portrait of the Inner City
Population Ecology
To Each a Rightful Share
At Home, 2001
Autos, Autos Everywhere
Cities of the Future
The Futurists
A Trip form Chicago
Tomorrow Is Now

Filmstrips

Prehistoric Man
Listening Skills Series
The Great Lakes Results of Pollution
Moving West
The Coming Era of Satellite Communications

Resources

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Occupational Exploration Kit - Copyright 1964
Occupational Exploration Kit - Copyright 1967 Revised 1968
Widening Occupational Roles Kit - Copyright (latest) 1967
Occupational Brief Set
Cronicle Occupational Briefs
Employment Information Series
Career Development Laboratory Kit - Set includes the following tapes
    Electrician - Dentist
    Actor - Fashion Model
    Buyer - Stewardess
    Dental Hygienist - Policeman
    Computer Programmer - Veterinarian
    Radio Broadcaster - Account Executive
    Salesman - Business Consultant
    Personnel Counselor - Minister
    Research Scientist - Pharmacist
    Technical Writer - High School Teacher
    Telephone Operator - Court Reporter
    Physician - Dietician
    Medical Technologist - Physical Therapist
    Commercial Pilot - Professor
    Cost Analyst - Banker
    Editor - Librarian
    Research Scientist - Pharmacist
    Social Worker - Secretary
    Park Director - Reporter
    Nurse - Cosmetologist
    Forester - Military Personnel
    Lawyer - Architect
    Stockbroker - Waiter - Restaurant Manager
    Electronic Assembler - Auto Mechanic
    Photographer - Record Producer
    Teaching Assistant - Tool and Dye Maker
    Golf Professional - Fireman
    Insurance Salesman - Accountant
    Civil Engineer - Electronic Technician
    Driver Salesman - Realtor

Filmstrips

You and the Other Generation
Turning Over a New Leaf
College and Career
Careers in Science
What Good is School?
What Do You Like to Do?
What is a Job?
What Are Job Families?
Who Are You?
Careers in the World of Tomorrow
Careers Ahead

Books

Career Opportunities (4 Volume Set)

DAYTON

Language Arts

Communications and Human Relations

This unit is an example of a multi-ethnic approach to integrating careers and English in an urban setting.

Subject: Language Arts (Communication and Human Relations)
Topic: Trip to Glen Helen, Antioch College, Yellow Springs, Ohio
Grade: 8

Objective:

1. Students and teachers will share meaningful experience in communication outside the school setting.
2. Students will become familiar with careers associated with nature area such as naturalist, meteorologist, cook, camp director, botanists, and ecologists.
3. Students will live together in camp in an integrated setting which many have not experienced previously.
4. Success will be measured by enthusiasm and motivation for follow-up activities.

Rationale:

Enjoyment of learning about careers can be greatly enhanced by studying in the informal setting of this beautiful natural area. There is an ease in communication and human relations not found in the classroom.

Initial Experience:

1. Show color slides to class of Yellow Springs, the grapevine swing, and swinging bridge. Tell of the beautiful nature trails.
2. Discuss needed equipment such as sheet, pillowcase, and blanket or bedroll, towel, washcloth, soap, other toilet articles, slacks, blouse or shirt, sweater or jacket, sturdy shoes for walking.

Developmental Experience:

1. Guided tours through Glen Helen stressing science, history, and preparation for language arts.
2. Share work details to learn group responsibility.
3. Experience the thrill of a night hike without lights.

4. Share experience of varied ritual as girls performed ritual to prepare for bed, bringing a closer relationship to all.

5. Study of barometric pressure and humidity to forecast weather.

6. Study of trees and their legends as background for botany and science.

7. Sit in the pine forest, listening to the silence and the sighing of the pine trees, and feeling the bark of trees and pine needles.

8. Feel the pine cones, taste pine resin, and smell the freshness of plants early in the morning.

Culminating Experience:

1. Discuss the experience in class on Monday to relive the experience.

2. Write letter of thanks to Mr. Dickinson and staff. (Language for Daily Use, p. 265.)

3. Give prize for best descriptive essay on Glen Helen.

4. Read Hailstones & Halibut Bones or What is Gold as motivation for poems entitled "What is Black?"

Enriching Experiences:

1. Walking the nature trails, swinging on the grapevine swing, holding hands as we walk on a fast night hike in the dark, and living together away from school.

2. Singing around the campfire, singing the popular songs, spirituals, and ending with Kum-Bah Yah as we hold hands and sway to the music.

3. Make a tape to accompany the slides.

4. Use a stick to beat rhythm on a hollow log as people must have done long ago.

BLACK

Black is beautiful I always say;
Black is on my skin each day.
Black is some of my friends I know;
Black isn't what you plant and grow.
Black is me, and black is bold.
Black is very special to me
'cause I am black as you can see.
Black to me is a pot of gold;
Black to others is a lot of soul.
Black is beautiful not only to me;
Black is beautiful to others you see.

By Connie Arnold
Longfellow 10-10-70

Black is very, very dark;
It reminds me of tree bark.
Black resembles a cold night
Without a star or creature in sight.

It is when I went on a hike;
That's the kind of black I like.
Black is beautiful most of the time,
But when something is too black
It's a crime.

For some reason, Black and
White can't get it together;
I just hope things will get better.

By Bernisha Snow
Longfellow 10-10-70

Black can do a lot of things,
  Print words to read
  And songs to sing.

Black is what you feel when you're sad,
  When you haven't done a good job,
  Or when you're sorry
  That you've been mad.

A black, black night is when there's no light,
  When you're in an old street,
  When you're afraid there
  Might be a fight.

Black makes a beautiful background
  For the stars to shine,
  For a tree full of snow,
  For a glass of wine.

Black, best of all are some
  Of my friends.
Let's hope this relationship
  never ends.

By Nina Kuntz
Longfellow 10-10-70

PARMA

Language Arts

This is exemplary of a balance between subject areas and careers. Student evaluation techniques are included.

English Career Program

Introduction

The English Career Program in junior high is divided into two areas, career orientation for seventh and eighth grade, and career exploration for ninth grade. The main objectives of this careers program is to offer the students as many opportunities as possible to learn about a variety of careers related to the study of English. Through student-centered activities such as simulated experiences, "hands-on" experiences and by the use of occupational literature, films, speakers, and field trips, students will be exposed to potential careers in English.

In the career orientation program for seventh- and eighth-grade the students will "try out" real work tasks and be given hands-on activities for implementing career instruction.

Seventh-Grade Career Orientation Units:

Orientation to Library Career Materials
Communication Through Advertising
Communication Through Journalism

Eight-Grade Career Orientation Units:

Career Opportunities in Advertising
Careers in Public Speaking
Careers in the Theater
Careers in Journalism and Broadcasting

The ninth-grade career exploration is a phase where more specific areas are explored to provide the student with a better view of the world of work. The activities will resemble those tasks performed on a job by a worker in a particular career.

Ninth-Grade Career Exploration Units:

Careers in Literature - Introduction to Literature
Careers in Writing - Introduction to Compostion
Careers in Public Speaking - Speech Activities
Careers in Journalism - Journalism
Careers in the Theater - Introduction to Theater

Orientation to Library Career Materials

Grade 7

I. Objectives

1. Students will be able to locate and use the career materials in the library.
2. Students will demonstrate their ability to use library resources by researching a career and writing a report.
3. Students will list in their written report the English skills used in the career to emphasize the importance of English skills involved in a variety of careers.

II. Method

Library research
Written reports
Discussion of English skills needed in each career researched
Role-playing

III. Activities

1. Each student will name the career he is interested in. The teacher lists these on the board.
2. Teacher and class list careers related to English.
3. Discuss how English skills are used in the careers chosen by students.
4. The class will go to the library for an orientation to the career materials available in the library.
5. Students will write a report on the career of their choice. These reports should include the English skills required in this career.
6. Students should be required to research a career related to English if they do not have a career in mind.
7. After students have researched their careers, they will work in pairs or small groups to present their information to the class.

   The career information should be presented in the form of skits that include the job description (salary, educational requirements, opportunities).

   Example Situations:

   a. Child discussing his career with a parent.
   b. A parent discusses his career with son or daughter.
   c. Job interview at an employment agency.
   d. Several students discuss their future careers.
   e. A student talking to a counselor about what courses he should take for a specific career.

Student Evaluation

Orientation To Library Career Material

1. Did this unit help you to understand how to use library career resources?
______ Yes ______ No

2. Would you ever use the library career material without being assigned to do so?
______ Yes ______ No

3. Were the career skits worthwhile in informing you about a variety of careers?
______ Yes ______ No

4. Did you know so many careers required English skills before studying this unit?
______ Yes ______ No

5. Check the two career resources that were the most helpful in writing your report.
______ Books
______ Vertical File
______ Pamphlets
______ Audiovisual
______ Occupational Briefs
______ Loose Leaf Career

6. Did the presentations in class influence your choice of possible careers to consider for the future?
______ Yes ______ No

7. What career are you interested in at this time? ______________________________
____
Why? ______________________________
____
____

Communication Through Advertising

Grade 7

I. Objectives

1. Students will list, discuss and role-play careers related to the field of advertising.
2. Students will write letters to advertising firms and take notes from resource materials to obtain information relating to advertising careers.
3. Using visual aids and tapes, students will be able to identify different methods involved in advertising media.
4. Students will discuss production techniques and produce materials for advertising so they can identify the skills involved in the mass media.

II. Methods

Ad copy writing
Sales talks
TV commercials
Denotation and connotation of words through dictionary study
Role-playing
Speakers
Reading newspaper classified ads

III. Suggested Activities

1. Discuss careers in advertising.
2. Write ads for noon movies and for books on display in library.
3. Present skits of TV advertisements which the students write.
4. Interesting other members of the class in books by role-playing, writing blurbs, and evaluating blurbs used on book jackets.
5. Guest speakers in the area of advertising.
6. Use overhead projector, tapes and other visual aids to present ads.
7. Rewriting published copy to stress synonyms and use of dictionary.
8. Advertising copywriting activity - students correct grammatical errors in written paragraphs.
9. Communicate through non-verbal activities (pantomime an ad).
10. Posters for windows in local stores.
11. Create a product and make up an ad for it. In a grouping of three, one student will write, one illustrate, and one proofread.

IV. Potential Careers

Advertising Copy Writers
Copy Reader
Advertising Mail Clerk
Advertising Director
Advertising Manager
Advertising Agency Manager
Advertising Departments

a. Department Stores
b. Political Campaigns
c. Private Business or Industry
d. Shopping Centers
e. Special Events

BIBLIOGRAPHY

1. Writing as a Career, Norman M. Labsenz, Chapter 7. Henry Z. Walck, Inc.

2. Encyclopedia of Careers and Vocational Guidance, page 47.

3. Cowles Guide to Careers and Professions, Professor Max L. Marshall. Cowles Education Corporation.

4. Films

   Your Career in Advertising, Messner Publishing.
   Retail Advertising, 16 mm, sound, color, 10 min. retail advertising department of a daily newspaper.

Nine-Week Tentative Lesson Plan in the Unit "Communication Through Advertising"

First Week

Communicate Through Advertising

1. Use overhead projector to show large, colorful ads. Discuss different methods used to attract attention.
2. Students bring in two ads and write paragraphs describing the ad and telling methods that were used.

Second Week

Activities Involving Ad Writing

1. Major activities in writing ads. Refer to sample lesson plan.
2. Choose best ads to place on bulletin board.
3. Learn about denotation and connotation of words.
4. Have students consult local, privately owned stores and ask if they might do posters advertising the store's products. Work on the posters in class, stressing the fact that they must be of a very catchy and professional nature to be effective and acceptable. Principles of advertising are to be followed.

Third and Fourth Week

Writing Research in Advertising

1. Letter writing for advertising career information. Refer to addresses in pamphlets on advertising managers in Vocational File.

2. Note taking based on advertising jobs, using resource pamphlets and other library materials.

Fifth Week

Group Activity

1. Groups of three work together to produce a radio, television, or illustrated cartoon ad to be presented to the class. Time may be allotted in class for group work on this project which should take approximately a week.

2. Simulate a situation in which a group of four or five students assume the role of a salesmen. Each group will be responsible for selling a product to the class using the techniques studied. The activity could follow the format of a talent show--the winner being acclaimed ''salesman of the day.''

Sixth and Seventh Week

Career Jobs in Advertising

1. Compile a booklet written by students featuring descriptions of career jobs in advertising and best group activity projects in class. This booklet could be displayed in the library and made part of the permanent career materials.

2. Have students create jingles for advertising a product. Use current jingles as examples to stimulate interest. Remind students to be original and creative. Tape these jingles for play back.

Eighth Week

Evaluation and Pre-View of Next Unit

1. General discussion concerning careers in advertising and class reports on careers based on students' notetaking and other research in writing letters for information.

Sample Daily Lesson Plan - One Week

Communication Through Advertising

First day:

Discuss: What is advertising?
What jobs are involved in advertising work before the potential buyer is exposed to the product? (writer, artist, proofreader)

Assignment: Students select one ad from a newspaper and one from a magazine for class discussion the following day.

Also, students should see the noon movie for the week because they will be asked to write an ad for it in the next two or three days.

Second day:

Students write comments on the following:

1. How do different types of printing and lettering change the appearance of the ad?
2. Does the vocabulary change for different types of products? How? Have students list examples from their ads.
3. Does the wording fit the illustration? Examples from ads.

After students have analyzed the two ads which they have brought in, the entire class should discuss the ads.

Assignment: Students should rewrite one of their ads.

Third day:

Present a picture on the opaque or bulletin boards and have entire class compose an ad.

Assignment: Students should write their own ads for the noon movie and illustrate them in some way.

Fourth day:

Discuss students' ads. Lesson involving denotation and connotation of words may be used at this point.

Assignment: Students should invent some original product of their own and compose an advertisement for it. Either their own illustrations or pictures from magazines may be used.

Fifth day:

Students present their original product ads to class. Class may discuss and evaluate the ads. This could be an evaluation grade for each student.

Alternate daily lesson plan:

Three students will write and practice a skit depicting an ad man trying to convince his boss and client that he has developed an effective ad for the product. He will stress its good points.

The class will then discuss what they have seen.

Student Evaluation

Communication Through Advertising

1. Did you know anything about careers in the advertising field before studying this unit?
__________ Yes __________ No

2. Did you know about this field from
__________ Home
__________ School
__________ Other

3. Which of the following activities did you find the most valuable?
__________ Class discussion of advertising media
__________ Writing ads for movies or books
__________ Advertising skits
__________ Speakers
__________ Creating a product and making up an ad for it

4. Did the role-playing situations help you to understand what a job in this field would be like?
__________ Yes __________ No

5. Were the careers in this unit explored
__________ Too much __________ Just enough __________ Not enough

6. Did the outside speakers help you understand what a job in this field would be like?
__________ Yes __________ No

7. Which of the following would you consider as a possible career?
__________ Advertising Copy Writer
__________ Copy Reader
__________ Advertising Department
__________ Advertising Artist
__________ Advertising Director

Communication Through Journalism

Grade 7

Introduction

This unit was devised to acquaint students with background information and careers related to journalism.

I. Objectives

1. Students will research historical information and careers related to journalism.
2. Given a newspaper, students will discuss various types of news articles and techniques used in preparing a paper.
3. Students will assemble a newspaper notebook giving examples of different types of articles and techniques.

II. Methods

Role-playing
Research
Oral reports

III. Activities

1. The class should be divided into two groups. One group should research careers in the library and the other research the historical aspect of journalism.
2. The students who researched careers should give a short oral report to the class. The group who compiled information on the historical aspect of journalism should present this in the form of role-playing situations.
3. Each student should be required to bring a newspaper to class. The newspaper will be studied in terms of articles (news, sports, syndicated columns) and technique (bylines, banner lines, masthead).
4. After discussing the different types of articles and techniques used in a paper, students should compile a newspaper notebook giving examples of news, sports, society articles, and techniques such as bylines, date lines, masthead.

BIBLIOGRAPHY

Barry, John M., Opportunities in Journalism Careers, Vocational Guidance Manuals, 1967, p. 136.

Brucknew, Herbert, Journalist, Collier-Macmillan, 1962.

Colman, Hila, Beauty, Brains, and Glamour. A career in magazine publishing, Careers in the Making series.

Ryan, Leonard Eames, So You Want To Go Into Journalism, Harper and Row.

Stein, M. L., Your Career in Journalism, Messner Publishing.

Student Evaluation

Communication Through Journalism

1. Did you know anything about careers in journalism before studying this unit?
__________ Yes __________ No

2. From what source did you gain this information about journalism?
__________ Home
__________ School
__________ Other (Explain)

3. Which activity did you find most helpful? Rank the following from (1) most informative to (4) least informative.
__________ Researching and reporting on historical information.
__________ Researching and reporting on careers in journalism.
__________ Discussing and identifying various articles and techniques.
__________ Compiling a newspaper notebook.

4. Did you feel that careers in journalism were explored:
__________ Not enough __________ Just enough __________ Too much

5. Were there careers of interest to you which were not covered?
__________ Yes __________ No
If yes, which ones: ____
____

6. After studying this unit would you consider a job related to journalism?
__________ Yes __________ No

7. Are there suggestions or comments for the improvement of this unit?
____
____
____
____

Career Opportunities in the Advertising Field

Grade 8

This unit is based on the belief that the Careers Program can be incorporated into a workable English unit.

This unit is involved with descriptive writing using sensory images. The students will be able to identify and write examples of similes, metaphors, and personifications in connection with the creating and writing of advertisements.

As a final project of this unit, each student will create a product, write an ad, and plan an ad layout. Each student will submit his advertising ideas to a student in the eighth-grade art classes. The art class will design the ad according to the description received. The best ads will be selected by the student body (display case voting) and published in the school newspaper and literary magazine.

By involving the students in this type of project, they will become aware of the variety of careers available in the field of advertising.

I. Objectives

1. Students will write an original caption for an advertisement using words that appeal to the five senses.
2. Students will write a paragraph appealing to a specific sense.
3. Students will identigy literal and figurative comparisons.
4. Students will identify and write similes, metaphors, and personifications.
5. Students will use similes, metaphors, and personifications in writing original advertisements.
6. Students will write precise directions using descriptive words.
7. Students will write a caption and design an ad for a product they create.
8. Eighth-grade art students will design an advertisement from a written description submitted from eighth-grade English students.
9. The students will compile a list of careers involved in the field of advertising.

II. Procedure

1. As an introduction to this unit, have students compile a list of occupations in the field of advertising. Students should choose one and make a report to the class.
2. Show students advertisements selected from newspapers and magazines.
3. Discuss each ad in terms of:

   How the advertiser expects you to feel, taste, smell, touch or hear his product.

   Make students aware of the senses.

4. Tell students these are visual images which come from the senses. List the five senses on the board. Identify senses appealed to in each ad.

5. Examine each ad in terms of word choice to create a specific image.

6. Distribute ads without captions and have students write their own original captions.

7. Have each student show his ad and read his caption. Discuss each ad in terms of sense appeal and word choice.

8. Worksheet-select descriptive words to complete a basic sentence pattern.

9. Bring in five objects. Blindfold a student and give him one object. By using all senses except sight, he should try to identify the object. He should write words on the board to describe it as he examines the object.

10. Distribute five paragraphs each appealing to one of the senses. Examine each for word choice. Students should write five paragraphs each appealing to a specific sense. (See worksheet for model.)

11. Distribute a paragraph that appeals to the senses. Identify words that appeal to each specific sense. (See worksheet for model.)

12. Distribute a list of details and have students create a vivid sensory impression using at least two adjectives or two adjective phrases.

13. Distribute a list of general situations and ask students to select one and expand it into a descriptive paragraph.

14. Distribute ads without captions and have students write a caption.

15. Study of literal and figurative comparisons. Distribute a list of comparisons and have students decide which exist in real life (literal) and which exist in writing (figurative). (See worksheet.)

16. Students will write five literal comparisons and five figurative comparisons.

17. Collect comparisons and choose figurative comparisons that are correct and put them on the board. Have students identify the words that seem to recur in all comparisons (like, as).

18. Distribute a selected group of poems and have students select and explain meaning of similes used in poem.

19. Students will write an ad for a product of their choice using a simile in the caption.

20. Students will write a list of similes and discuss.

21. Distribute a list of metaphors and have the students indentify what is being compared. Define metaphor as being an implied comparison without the use of like or as.

22. Distribute a group of poems to select the metaphors (teacher will have to reinforce work until the students can point them out).

23. Practice writing metaphors.

24. Distribute a list of sentences that contain personification. Ask the students to identify human characteristics then identify what they are describing. Define personification.

25. Make a list of inanimate objects and have students assign them human characteristics. (See worksheet for additional work.)

26. Each student will bring in a picture of a product on the market and write an ad using similes, metaphors, and personifications. The student should use at least one figurative image in his ad.

27. Divide class into groups and have each group discuss its ads and present the best to the class, explaining the reason for its choice.

28. Students will write an ad for a product they have created.

    a. Students will submit their caption and a description of their product and tell what their product is used for.

    b. Students will present ideas for product to the class.

    c. Students will submit their products to the eighth-grade art class, so the art class can design the ad from their caption and description.

    d. When the ad is completed, both art and English class will join, and the artist and the writer will then have to present the ad to the class and sell their idea.

29. The best ads will then be submitted to the industrial arts department to be printed.

30. The school newspaper will select some and run them in the paper.

31. The final ads will be displayed in the showcase.

Suggested Follow-up Activities

1. Since students have been introduced to sensory imagery and descriptive writing, the teacher could develop this into a writing unit. Any poems, compositions, or short stories written during this unit could be submitted to the art department for illustration and published in the school literary magazine.

   During this unit different writing careers can be studied. Speakers from various fields of journalism can talk to students about writing careers.

2. To pursue the advertising career further the teacher may study advertising careers in TV and radio. Trips to local radio and TV stations could be a part of this unit. Speakers from advertising agency could inform students about careers in planning radio and TV advertising campaigns.

   Possible classroom simulations for radio and TV advertising could include student writing and video taping TV commercials and tape recording radio commercials.

   Students can also plan a radio commercial for a coming school event and run the commercial on the P.A. morning announcement show.

Films

Retail Advertising, 16 mm sound, color, 10 minutes, 1963. Copley Production, 434 Downes Place, Chicago, Ill. 60506

Resources for Careers in Advertising

Library Career Pamphlet File - Advertising

Chronicle Occupational Brief in Occupation File - Ad assistant, Ad manager, Ad copywriter

Books

Angel, Juvenal, L., Careers in Design, Decoration, and Commercial Art, World Trade Academy Press, New York, 195[illegible].

Biegelerson, J.I., Careers in Commercial Art, Dutton Company, New York, 1952.

Deutscher, J. Noel, Your Future in Television, Rosen Press, New York, 1963.

Lobsenz, Norman M., Writing As A Career, Walck, New York, 1963.

Roth, Claire J. and Weiss, Adelle, Art Careers, Walck, New York, 1963.

Ryan, Bernard, and Ryan, Leonard, So You Want to Go Into Journalism, Harper, New York, 1963.

Student Evaluation

Communication Through Advertising

1. Do you know more about jobs related to the field of advertising than you did before studying this unit?
__________ Yes __________ No

2. Did the outside speakers help you better understand what a job in this field might be like like?
__________ Yes __________ No

3. Were careers in advertising explored:
__________ too much __________ just enough __________ not enough

4. Did you feel you gained a "true experience" in the field of advertising by writing an ad and having it developed and illustrated by the art class?
__________ Yes __________ No

5. Which activity gave you the best idea of what a career in advertising is like?
__________ writing captions for ads
__________ writing descriptions used by the art classes
__________ listing and researching careers in the field of advertising
__________ discussing ads brought to class from newspapers and magazines
__________ outside speakers

6. Since this unit was combined with lessons in descriptive writing do you feel you have a better understanding of how good writing techniques could help you if you chose a career in this field?
__________ Yes __________ No

7. In comparison with the advertising unit you studied in seventh grade, is the eighth grade unit (check as many as you wish)
__________ better than the seventh grade unit?
__________ worse than the seventh grade unit?
__________ the same as the seventh grade unit?
__________ a re-enforcement of what was learned in seventh grade?
__________ all new to you?

Career Opportunities in the Theater

Grade 8

This unit should be used in conjunction with the study of plays. This is an introductory unit to careers in the theater. The ninth-grade theater class will explore these careers in more depth. The purpose of this unit is to acquaint the students with the careers available in the theater and give them a chance to experience the various jobs through role-playing.

I. Objectives

1. Given a list of careers in the theater, groups of students will research and lead a class discussion related to the careers.

2. To offer the students the opportunity to gain experience in play production, the students will role-play activities that simulate career situations in the theater.

II. Methods

Library research/class discussion
Group reports to class
Role-playing
Field trip

III. Activities

1. Students will be given a list of careers related to the theater (actor, director, costumes, set design, publicity, lighting).

2. The class will be divided into small groups and each group will choose a career to research.

3. Each group will present its information and lead a discussion on the career.

4. The teacher will select a play or plays and assign a scene to each group.

5. Each group will be involved in the following activities in connection with the production of their scene:

   Casting - try to give each member a part either as actor or director.

   Set Construction - students in charge of set design should build a model set in a shoe box.

   Costumes - each actor will dress a doll to represent the costumes he would use.

   Publicity - each group will design a poster to advertise the scene.

   The students will present their scenes to the class.

6. Students should be taken to the ninth-grade theater class to see a production of a play.

Field trips to local high schools to tour the stage (technical aspects).

BIBLIOGRAPHY

Carter, Conrad, and A.J. Bradbury, The Production and Staging of Plays. New York: Arc Books Inc., 1963.

Gren, Michael, Theatrical Costume and the Amateur Stage. Boston: Plays Inc., 1968.

Nuttal, Kenneth, Your Book of Acting. London: Faber and Faber, 1958.

Smith, Mayne Rice, Plays and How to Put Them On. New York: Henry Z. Walck, 1961.

Weales, Gerald, A Play and its Parts. New York: Basic Books, Inc., 1964.

Welker, David, Theatrical Design: The Basic Techniques. Boston: Allyn and Bacon, Inc., 1961.

Student Evaluation

Career Opportunities in the Theater

1. Do you know more about jobs related to the theater than you did before studying this unit?

__________ Yes __________ No

2. Did the role-playing situations you were involved in help you to understand what a career in this field is like?

__________ Yes __________ No

3. Rank the following activities as to how valuable they were in learning about these careers. Number (1) is the most valuable.

__________ Library Research
__________ Group Reports
__________ Construction of a Model Set
__________ Costumes
__________ Production of Group Scene

4. Were the careers in this unit explored

__________ Too much __________ Just enough __________ Not enough

5. After studying this unit would you consider a career in the theater?

__________ Yes __________ No

6. Which job would you consider as a possible career?

__________ Director
__________ Actor
__________ Costumes
__________ Lighting and Sound
__________ Properties
__________ Make-up
__________ Set Design
__________ Publicity-Business

7. Do you feel all the time spent on planning your group production was valuable in learning about the theater?

__________ Yes __________ No Explain answer ____________________

____

____

____

____

Careers in Journalism and Broadcasting

Grade 8

Introduction

This unit is designed to develop the students' awareness of the careers available in the areas of journalism and broadcasting. The unit should be used in conjunction with a composition unit so that the students can apply the skills studied in composition to the careers.

I. Objectives

1. Students will research, list and discuss careers related to the mass media field.
2. Students will role-play various careers involved in journalism and broadcasting.
3. Students will demonstrate their writing ability in the areas of reporting, editorializing, and creating journalistic media.

II. Methods

Role-playing
Outside speakers
Field trips
Films

III. Activities

1. Writing feature articles
2. Reporting school events
3. Field trips to newspaper offices and radio or television stations
4. Guest speakers
5. Discussing potential careers in the field of journalism and mass media
6. Films

   Newspaper in the Ohio Heritage, 14 minutes
   That the People Should Know, 21 minutes
   Classroom Service Department
   Modern Talking Pictures Service
   1212 Avenue of the Americas
   New York, New York 10036

7. Bringing newspapers to school and discussing different techniques used to write news stories, editorials, reviews, society, and political features.
8. Students will observe a simulated situation (accident, robbery) and write a news article.
9. Students will write a critical review of a movie or a play.
10. Role-playing a script written by members of the class who will act as newscasters, weathermen, disc-jockeys, talk show hosts and guests.

Sample Potential Careers

- Newspaper reporter
- Technical writer
- Copyreader
- Photo journalism
- Editor
- Script writers for television and radio
- Radio and television news writers
- Writers for business and professional magazines

BIBLIOGRAPHY

1. Barry, John M., Opportunities in Journalism Careers, Vocational Guidance Manuals, 1967, p. 136.

2. Brucknew, Herbert, Journalist. Collier-Macmillan, 1962 (A Macmillan Career Book).

3. Colman, Hila, Beauty, Brains, and Glamour, a career in magazine publishing. Careers in the Making series, 1968.

4. Donahue, Judy, Your Career in Public Relations, Julian Messner, 1967, pp. 45-78. Also chapters on radio and TV.

5. Lobsenz, Norman, Writing as a Career, Walck, 1963, p. 110.

6. Murray, Joan, The News, McGraw-Hill. (A week with . . . series).

7. Ryan, Leonard Eames, So You Want To Go Into Journalism, Harper and Row, p. 192.

8. Schaleben, Arville, Your Future in Journalism, (Career in Depth Series).

9. Stein, M.L., Your Career in Journalism, Julian Messner.

10. Angle, Juvenal L., Careers in Journalism.

Magazines

Writer's Digest, "Photojournalism," Russ Arnold, July, 1967, pp. 30-33.

Encyclopedia

Cowles Guide to Careers and Professions, "Journalism," pp. 129-134, and "Publishing," pp. 208-211.

Tapes

"Your Future as a Newspaper Reporter," Guidance Associates, Harcourt, Brace And World, Pleasantville, New York 10570.

Other

Consult resource material in Occupational File on Careers.

Student Evaluation

Communication Through Journalism And Broadcasting Careers

1. What activity made you most aware of the career opportunities available in the field of Journalism and Broadcasting?______________________________
____

2. Did the outside speakers help you to understand the various occupations related to journalism and broadcasting?
__________ Yes __________ No

3. Number the following activities from the most important (1) to the least important (5).
__________ Writing articles for the newspaper
__________ Field trips to newspapers, radio, and television studios
__________ Discussion and reporting on careers
__________ Critical reviews for movies and plays
__________ Films

4. Did the role-playing situations you were involved in help you to understand what a career in these fields might be like?
__________ Yes __________ No

5. After studying this unit do you feel you might consider a job related to the field of journalism or broadcasting?
__________ Yes __________ No

Careers in Public Speaking

Grade 8

This unit should be used in conjunction with a basic speech/communication unit. During the speech unit students should be exposed to demonstration speeches, basic persuasive techniques and delivery skills (eye contact, volume, organization, appropriate word choice for audience, interest value). The students should learn the importance of effective communication in their future careers, as well as in their everyday experiences.

I. Objectives

1. Given a list of careers that require public speaking skills, students will research the career of their choice and report their findings to the class.

2. Students will role-play situations to demonstrate the importance of speaking skills in achieving effective communication.

II. Methods

Library research
Written and oral reports
Role-playing situations
Speech writing
Films

III. Suggested Activities

Potential Careers in Public Speaking

Sales
Radio and TV Announcer
Politician
Service Representative
Tour Guide

1. The above list of careers should be given to the students. The students should choose a career they are interested in researching.

2. The class should be divided into groups according to the career the students chose to research.

   Each career on the list should be studied separately. The group of students who researched the career being discussed should lead the discussion in developing and helping the class to understand the job description for the career.

   After each career is discussed, the students who researched that career will role-play situations that simulate duties of the career.

Example Situations

1. Salesman - Sell a product to the class (car salesman, furniture sales).

   Students should incorporate the necessary persuasive techniques in their role-playing.

2. Radio and TV Announcer - Students should write a radio or TV program (advertising, news show, talk show).

3. Speech Writer - Choose a famous person in politics (past or present). Write a speech that fits his ideas (George Washington, Abe Lincoln, Hitler, Richard Nixon).

4. Service Representative - Demonstration on how to "use" a product.

5. Tour Guide - Students who researched this career should plan tours around the building. Students should be divided into groups and be taken on tours by the "tour guides".

Resources for Careers in Public Speaking

Library Career Pamphlet File - "Radio and Television," "Performers and Producers," "Selling"

Film

Selling As A Career
Kent State University A-V Services

Books

Bienstock, Mike, Radio and Television: How They Work. New York: John F. Rider Publishing, 1963.

Deutscher, J., Your Future in Television. New York: Rosen Press, 1963.

Gordan, G. and Falk, I., Your Career in TV and Radio. New York, McGraw, 1968.

Ott, John, How to Write and Deliver a Speech. New York, Trident Press, 1970.

Student Evaluation

Careers In Public Speaking

1. Were you exposed to a wide variety of occupations in which public speaking skills are important?
   ________ Yes ________ No

2. Did you find the researched career group discussion worthwhile?
   ________ Yes ________ No

3. Do you feel you know more about the importance of speaking skills than you did before this unit?
   ________ Yes ________ No

4. Rank the following career role-playing situations as to how they helped you to realize the importance of being able to communicate effectively in various occupations. Number one is the most informative and number five is the least.
   ________ Salesman
   ________ Radio and TV Announcer
   ________ Speech Writer
   ________ Service Representative
   ________ Tour Guide

5. Were you familiar with these careers before studying this unit?
   ________ Yes ________ No

6. Were careers explored:
   ________ Too much ________ Just enough ________ Not enough

7. Suggestions for improvement of the unit:
   ____
   ____
   ____
   ____
   ____
   ____

PARMA

Math

Math and careers are thoroughly integrated in this unit. A unique feature is the documentation of out-of-school activities integrated into the regular classroom procedure.

Parma
Career Orientation
Mathematics

For too many years, the student was encouraged to take mathematics because: "He would need it some day," or "all of life evolves around mathematics," or "Studying mathematics helps a person mature,' or finally "If one learns mathematics he becomes a better thinker." All of the above reasons sound good and sound meaningful, however, they are but "spin-offs" and not direct specific reasons for any one to study mathematics. It's just like studying Latin to learn English.

At the same time most students graduating from high school are supposedly getting the prescribed education, unsure as to what they want to do and be in the years that lie ahead. The student who chooses to continue his education will spend the first two years trying to decide his destiny. And the student who chooses to compete in the world of business and industry is uncertain as to what he wants to do. Now he can get the job every one always told him he couldn't get unless he had his diploma, but what job does he want to get?

A recent survey conducted by Princeton University shows that over 85% of those employed in our nation are unsatisfied with their jobs and given the opportunity would choose another career. Unfortunately in most cases it is too late to make this change for one reason or another.

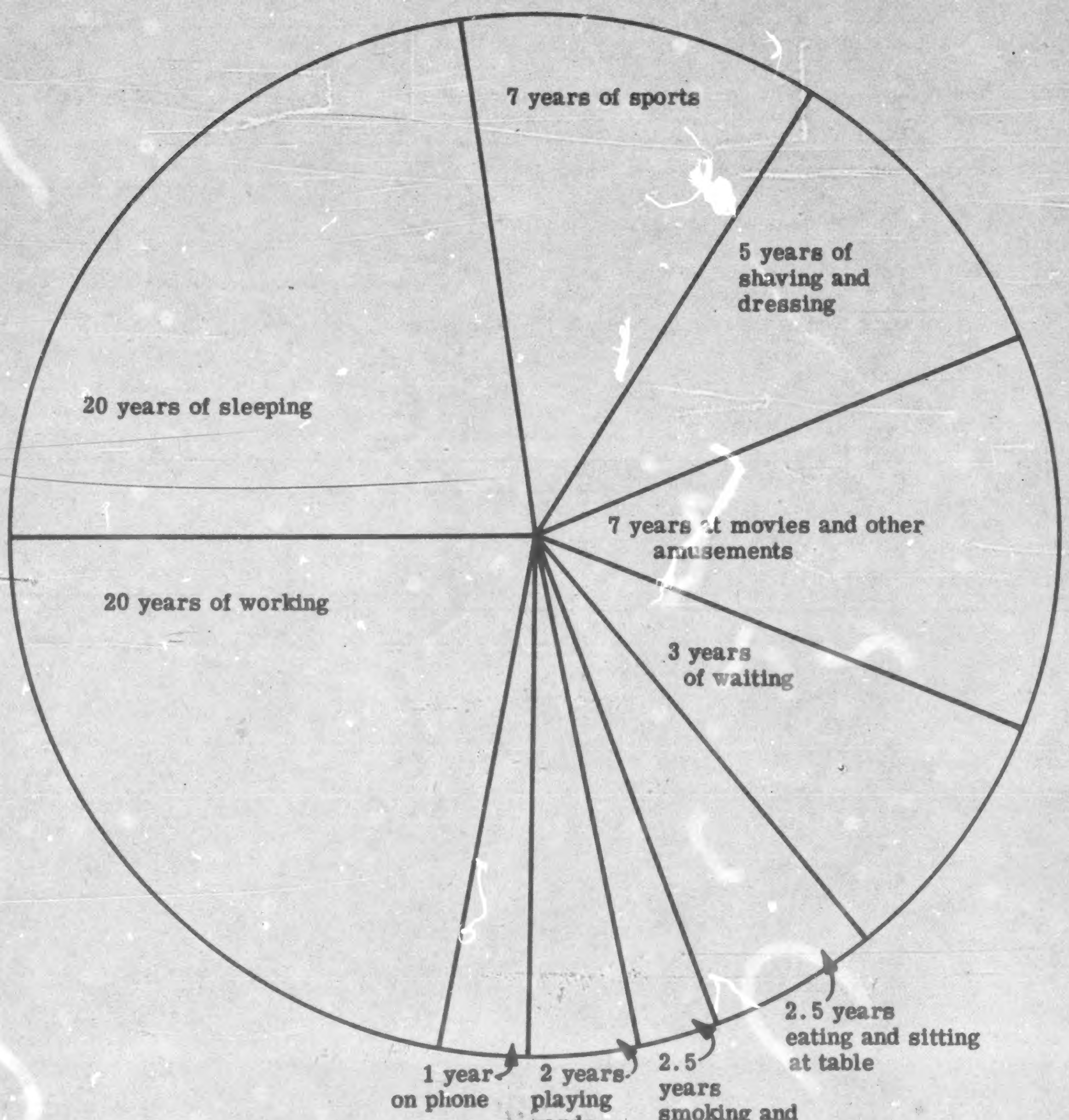
The simple fact is that the secondary educational system has no right to expect that students will have a specific direction or planned destination because the curriculum has no specific characteristics or intents to reach this goal.

Under the heading of Career Exploration and Career Orientation the mathematics department has written this material to help the teacher integrate the idea of career discovery as a regular part of the mathematics curriculum. It is not intended that careers be taught as an isolated course or as a separated unit, but rather as an integrated part of the regular mathematics curriculum.

The intent of this program is to provide direction and purpose for the teaching of mathematics. The material presented here is unlimited in that all careers or professions or occupations are acceptable for consideration and exploration. If the program is to reach its major goal, the classroom teacher must understand the nature of the program, that is, to provide the mathematics curriculum as the repository from which students can draw to reach their desired or chosen career.

HOW YOU SPEND YOUR LIFE

According to a recent report, by age 70 the ordinary person has spent his time as illustrated:



Pre Test for Careers in Mathematics

1. Have you decided on a career? __________

2. If the answer to number 1 is yes, what is the career? ____________________

3. If the answer to number 1 is no, what general field do you think you might be interested in? ____________________

4. Why have you chosen this career or field? ____________________
____

5. Do you know the qualifications necessary? If yes, what are they? __________
____
____

6. Is mathematics necessary? __________

7. If yes, do you know what math courses you should take in high school? (list them)
____

8. Do you need training beyond high school for your career? __________

9. Have you met someone in your chosen field? __________

10. Have you observed people at work in this field? __________

In regard to your career or field, state what you know about the following:

11. Usual working conditions ____________________

12. Personal contact with others ____________________

13. Demand for people in this field ____________________

14. Opportunities for advancement ____________________

15. Job security ____________________

16. Earning Power ____________________

Post-Test for Careers in Mathematics

1. Have you decided on a career? ____________

2. If the answer to number 1 is yes, what is the career? ________________________________

3. If the answer to number 1 is no, what general field do you think you might be interested in? ____

4. Why have you chosen this career or field? ____

____

5. Do you know the qualifications necessary? If yes, what are they?

____

____

6. Is mathematics necessary? ____________

7. If yes, do you know what math courses you should take in high school? (list them) ____

8. Do you need training beyond high school for your career? ____________
If yes, what type of training? ________________________________

9. Have you met someone in your chosen field? ____________

10. Have you observed people at work in this field? ________________________________

In regard to your career or field, state what you know about the following:

11. Usual working conditions ________________________________

12. Personal contact with others ________________________________

13. Demand for people in this field ________________________________

14. Opportunities for advancement ________________________________

15. Job security ________________________________

16. Earning Power ________________________________

Type of Activity: Teacher directed, in-class

Name of Activity: Introductory discussion of interests aptitudes, and aspirations in relationship to career choice (to be used after pre-test)

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed:

Concepts Involved: Relationship of factors in career choice

Objectives:

1. To stimulate students to think about career choice as it relates directly to them
2. To lead students to consider occupational choices on a more mature level

Career Application: Factors involved in a career choice

Time to Allow for Completion: One class period, maximum

Type of Student Involvement: Class discussion

Materials:

Costs Involved:

Needs Approval:

Teacher Activities:

Outline of Project: Introduce the discussion with a question such as, "If you could be anything you wanted to be, what would it be and why?"

Direct the discussion to factors in career choice. Using these, have students rate them in order of importance to them personally--not as they feel they should be rated.

Type of Activity: Out-of-class project

Name of Activity: Career Interview

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed:

Concepts Involved:

Objectives:

1. To give students a hands-on contact with someone in the career of their choice or in a career they are interested in.
2. To gain information concerning a career.

Career Application:

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: Questionnaire

Costs Involved:

Needs Approval:

Teacher Activities: Duplicate questionnaire for distribution to students

Outline of Project: Discuss briefly the proper way to arrange an interview and to conduct an interview. Give students the form on which to write their findings. After these are compiled, emphasize the range of the varying occupations and amount of math needed in them.

Math Project--Questionnaire

Directions: Find a person who has a job that you are interested in. Set up a time to meet with that person and use this questionnaire as a guide in interviewing him/her.

1. Position or title ______________________________

2. Job description ______________________________

3. Company ______________________________

4. Have you had what you might call informal training for your job?
If so, please describe ______________________________
____

5. Please indicate amount of required formal education.	Attended	Completed
a. High School	______	______
b. College	______	______
c. Special Training after High School	______	______
d. Special Training after College	______	______
e. Graduate School	______	______

6. How many years have you worked in your present job or profession? ______________

7. Is there anything you could have done before you started in your career that could have made you more successful? ______________________________

8. Which math course did you find most useful in your work?
   a. General Math ______
   b. Business Math ______
   c. Algebra ______
   d. Geometry and Trigonometry ______
   e. Other ______

9. Have you had to return to school or receive additional training for your job since you began working? Yes ______ No ______

10. List specific math-related courses in reference to questions number 8
____
____

11. What other jobs are open to you as a result of the education, training, and other experience you have gained in your present job? ______________________________
____

12. What other occupations would you be interested in other than the one in which you are presently employed? ______________________________
____

13. What changes or innovations in your job have you noticed since you became connected with it? ______________________________
____

Type of Activity: Out-of-class project

Name of Activity: Kriss Kross Puzzle on Careers Requiring Mathematics

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed: Understanding of how a kriss kross puzzle works

Concepts Involved: Various careers requiring mathematics

Objectives: The puzzle is designed to familiarize students with the names of different careers requiring varying amounts of mathematics training and ability.

Career Application: Same as objective above

Time to Allow for Completion: One day

Type of Student Involvement: Individual

Materials: Dittoed puzzle

Costs Involved: None

Needs Approval: No

Teacher Activities: Thermofax and ditto the puzzle on the following page so it can be handed out to all students.

Outline of Project: Puzzle is to be used as one of the introductory activities in order to familiarize students with different careers requiring varying amounts of mathematics training and ability. A key for checking this is also included. The teacher may wish to conduct a class discussion after completion or may wish to use the following activity as a further extension of this one.

KRISS KROSS PUZZLE ON CAREERS REQUIRING MATHEMATICS

6 letters
typist

7 letters
dentist
fireman
lineman
plumber
teacher

8 letters
engineer
FBI agent
surveyor

9 letters
architect
bank clerk
carpenter
dietitian
geologist
librarian
machinist
policeman
secretary

10 letters
geographer
iron worker
pharmacist
sales clerk
stock clerk

11 letters
bank officer
optometrist
postal clerk

12 letters
payroll clerk
social worker
stenographer
tool designer

13 letters
bill collector
meteorologist

14 letters
practical nurse

15 letters
statistical aide

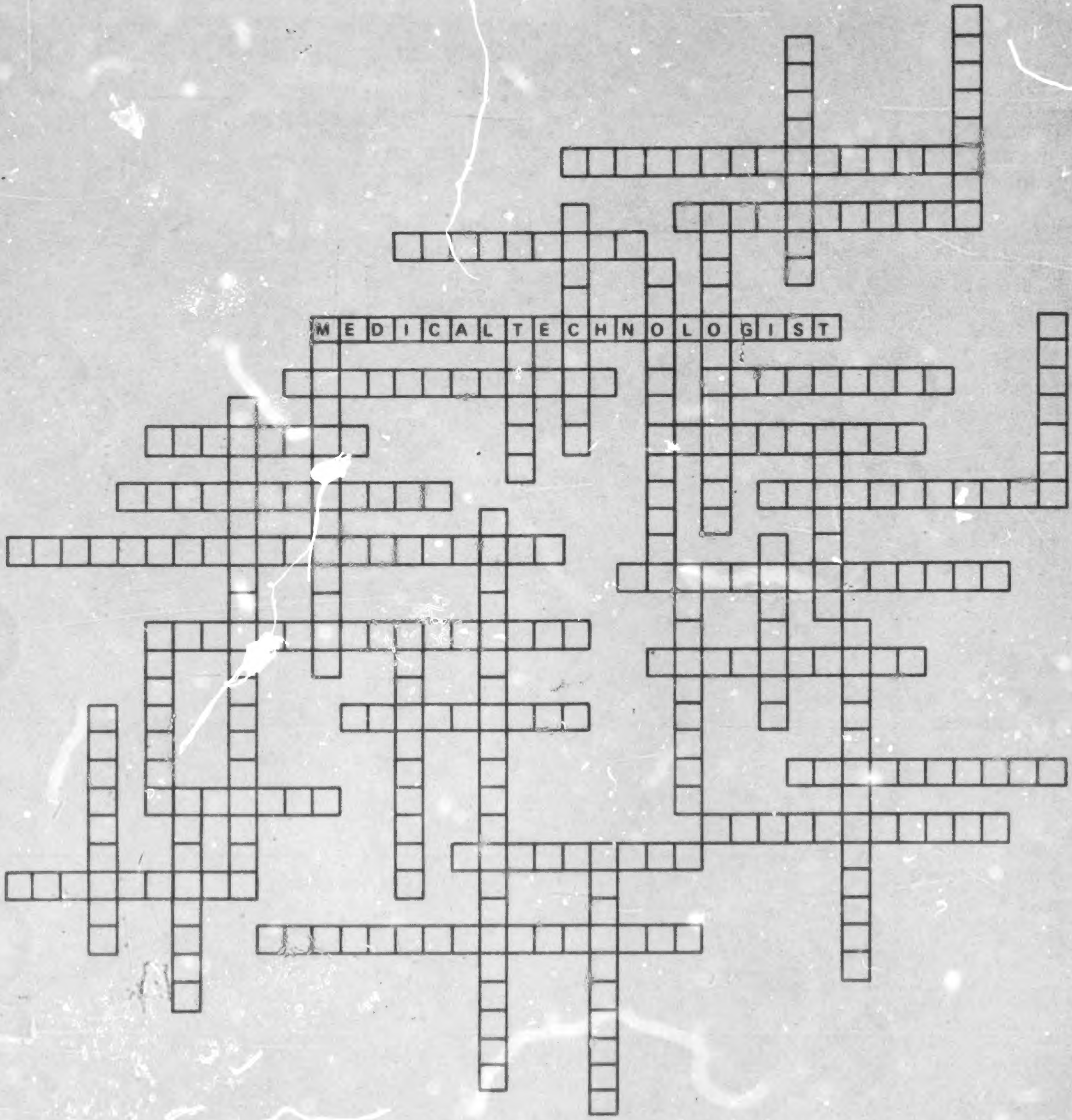
16 letters
doctor's assistant
food technologist

18 letters
aviation technician

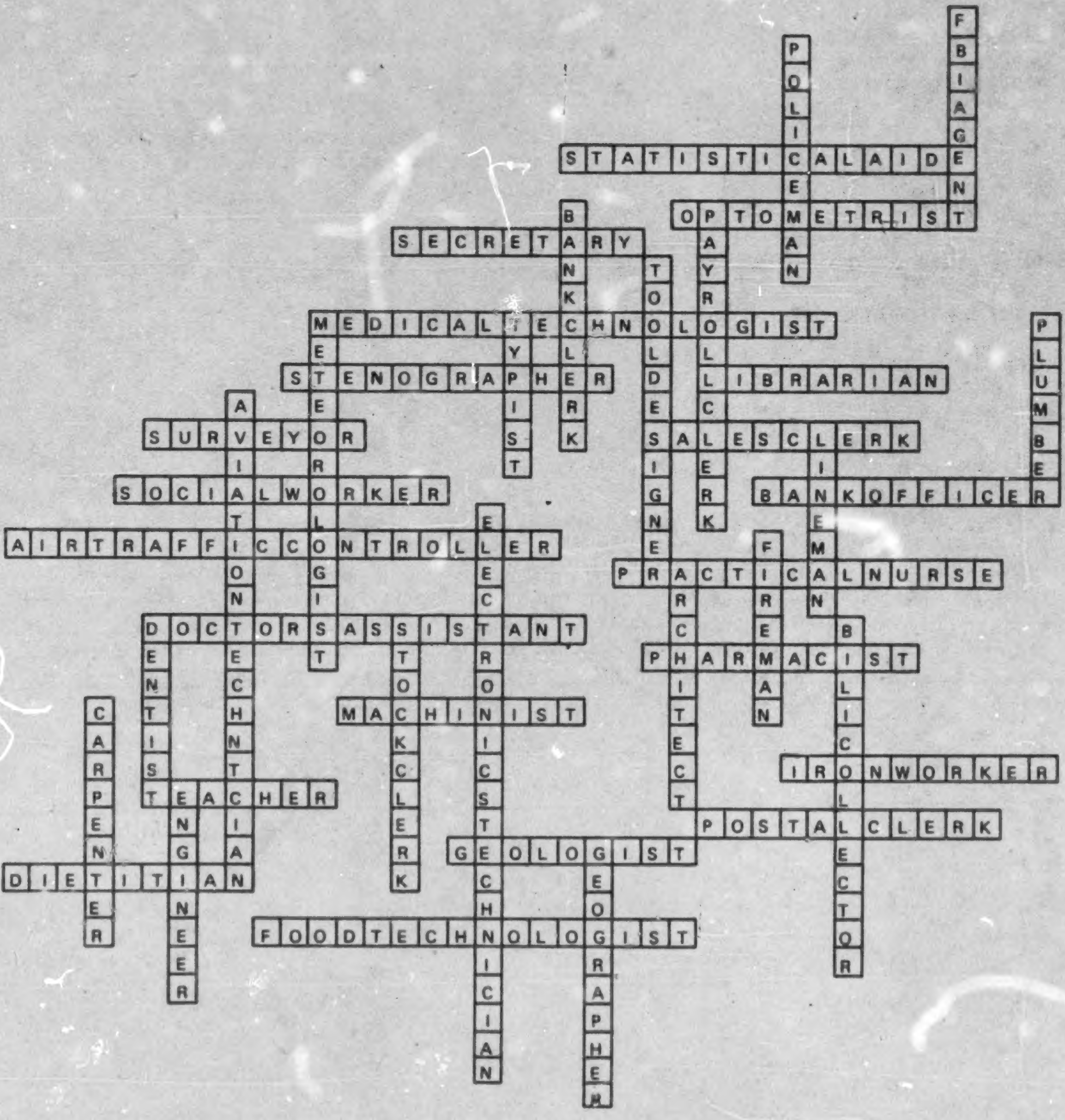
20 letters
air traffic controller

21 letters
electronics technician

KRISS KROSS PUZZLE ON CAREERS REQUIRING MATHEMATICS


MEDICALTECHNOLOGIST

SOLUTION FOR KRISS KROSS PUZZLE ON CAREERS REQUIRING MATHEMATICS


STATISTICALAIDE
OPTOMETRIST
SECRETARY
MEDICALTECHNOLOGIST
STENOGRAPHER
LIBRARIAN
SURVEYOR
SALESCLERK
SOCIALWORKER
BANKOFFICER
AIRTRAFFICCONTROLLER
PRACTICALNURSE
DOCTORSASSISTANT
PHARMACIST
MACHINIST
IRONWORKER
TEACHER
POSTALCLERK
GEOLOGIST
DIETITIAN
FOODTECHNOLOGIST
FBIAGENT
POLICEMAN
BANKCLERK
PAYROLLCLERK
TOOLDESIGNER
TYPIST
PLUMBER
AVIATIONTECHNICIAN
METEOROLOGIST
ELECTRONICSTECHNICIAN
ARCHITECT
FIREMAN
LINEMAN
BILLCOLLECTOR
DENTIST
ENGINEER
STOCKCLERK
CARPENTER
GEOGRAPHER

Type of Activity: Out-of-class project

Name of Activity: Company organizational chart

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed:

Concepts Involved:

Objectives: To learn the number of different careers involved in the operation of a company and how each career fits into its organizational structure.

Career Application: See "Objectives"

Time to allow for completion: One week

Type of Student Involvement: Individual

Materials:

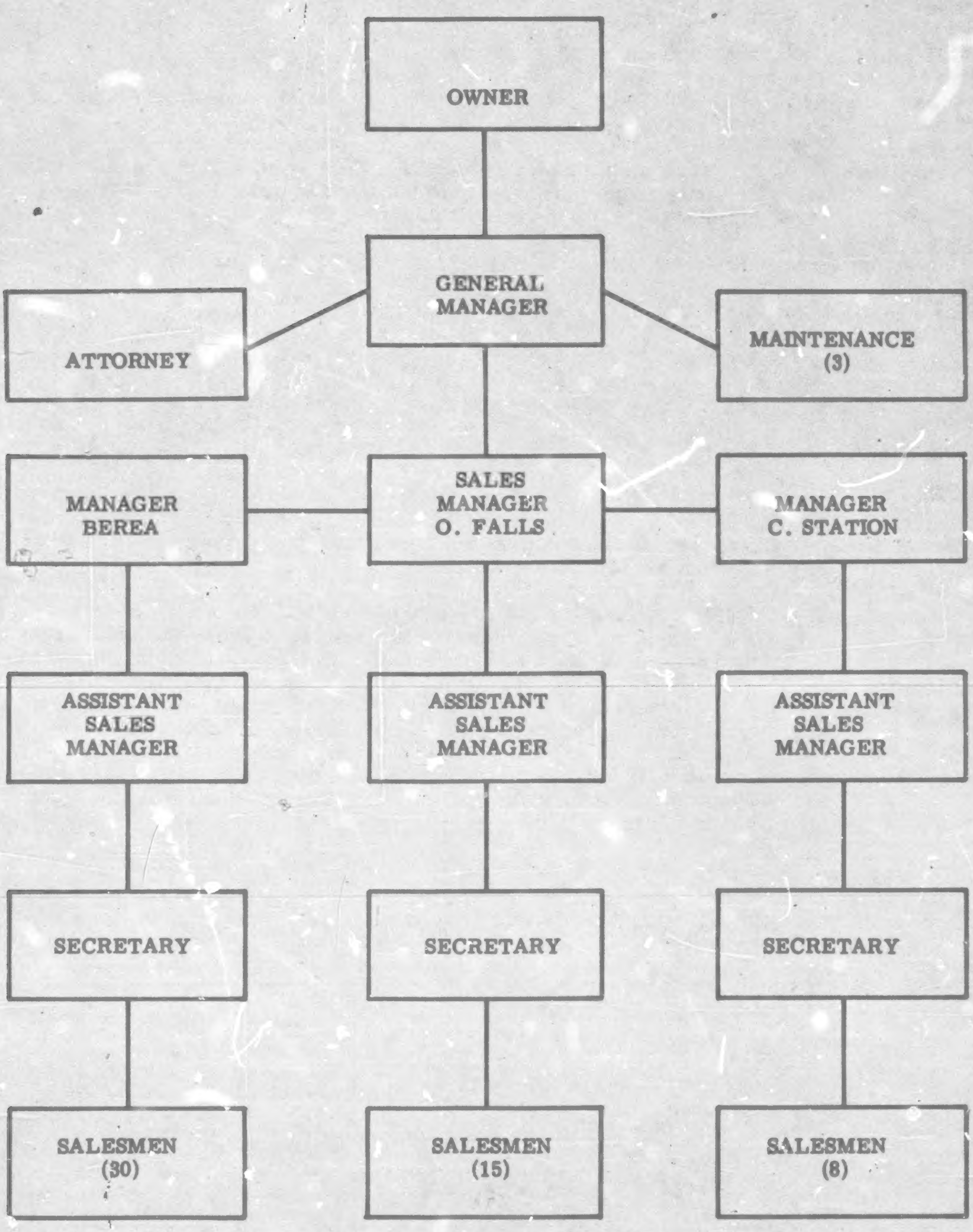
Costs Involved:

Needs Approval:

Teacher Activities: Make an overhead transparency of the following sheet so that it can be used in explaining the assignment.

Outline of Project: Students will be instructed to contact a company of their choice and find out what various occupations are necessary for the functioning of that company. They should construct a chart showing to whom each type of employee is directly responsible. After completion of the assignment, some of the charts might be used for a bulletin board display.

ORGANIZATIONAL CHART FOR CLINT WILLIAMS REALTY


OWNER
GENERAL MANAGER
ATTORNEY
MAINTENANCE (3)
MANAGER BEREA
SALES MANAGER O. FALLS
MANAGER C. STATION
ASSISTANT SALES MANAGER
ASSISTANT SALES MANAGER
ASSISTANT SALES MANAGER
SECRETARY
SECRETARY
SECRETARY
SALESMEN (30)
SALESMEN (15)
SALESMEN (8)

Type of Activity: Out-of-class project

Name of Activity: Scale drawing of a family room, or a living room-dining room combination

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed: Scale drawings, ratio and proportion, areas

Concepts Involved: Scale drawings, ratio and proportion (reinforcement), areas and conversion factors in areas.

Objectives: The student should be able to make a scale drawing of their family room or living room-dining room combination and using this, be able to compute the cost of carpeting or tiling it.

Career Application: Architect, Interior decorator, Installer of carpeting or tile

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: Graph paper, ruler, newspaper or magazine ads or catalog

Costs Involved: None

Needs Approval: No

Teacher Activities: The teacher should have discussed scale drawings and ratio and proportion with the class.

Outline of Project: In class, the teacher might want to use a grid to make a scale drawing of the classroom, having students measure it. Discuss then the units of measure used in the purchase of carpeting, and floor tile. As the assignment, students will make scale drawings of their family room or living room-dining room combination, use advertisements to decide what type of carpeting, or tile will be used, and compute the cost of doing so. The advertisement used should be attached to the scale drawing when turned in all computation should be shown. More capable students might wish to use different colors of tile to make a more artistic design.

Type of Activity: Out-of-class Project

Name of Activity: Catering a Party

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed: Equivalent measurements, addition and multiplication of fractions and mixed numerals

Concepts Involved:

1. The student will plan a menu for at least 25 people.
2. The student will, using recipes, figure amounts of food necessary for the party.
3. The student will, using newspaper food ads, compute the cost of the food.

Career Application: Food services

Time to Allow for Completion: Two weeks

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: None prior to explanation of project.

Outline of Project: The student will plan a menu for a party of at least 25 people. Using established recipes, he will then figure the amount of food necessary to prepare the menu. Newspaper food ads can be used then to determine the costs involved. The project should include:

Number of people involved.
Menu
Original recipes
Adjusted recipes
Shopping list, amounts of each item needed, cost of each item needed
Newspaper ads to support #5.
Total cost

Type of Activity: Out-of-class project

Name of Activity: Job Availability

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed:

Concepts Involved: Construction of a bar graph

Objectives: The student will construct a bar graph indicating availability of different types of jobs in newspaper want ads on any one day.

Career Application: Job availability

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: None, except explanation of project

Outline of Project: Using newspaper want ads for one day, the student wil tabulate the number of each kind of job available. From this, a bar graph showing this information will be constructed. The want ad section used should be attached to the bar graph.

Type of Activity: In-class, teacher directed

Name of Activity: Reading a Bus Schedule

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed: Understanding of A.M. and P.M.

Concepts Involved: Time zones, reading references and restrictions on a table, addition and subtraction in time measurement

Objectives: The student will be able to read a bus schedule, to plan a trip; determine times of departure and arrival, figure routing on a trip, and figure length of time a trip will take.

Career Application: Bus driver, dispatcher, ticket agent, information telephone operator, baggageman or freight employee

Time to Allow for Completion: One class period

Type of Student Involvement: Individual

Materials: Greyhound bus schedules (enough of one kind for the entire class and several copies of each of the other kinds available)

Costs Involved: None

Needs Approval: No

Teacher Activities: Teacher will secure schedules from Greyhound Lines.

Outline of Project: The teacher will pass out identical copies of bus schedules to the entire class. When explaining the schedules, emphasize such things as A.M. is light face type, P.M. is bold face type, departure times, arrival times, times given for each city according to time zone, routing, the reference and restrictions tables. Students could use the table then to plan a trip (points of departure and arrival decided upon by the teacher). If time allows, the other schedules could be distributed for students to plan a trip of their own choosing. Included in these plans should be times of arrival and departure, routing of the trip, and length of time the trip will take (total length of trip, and actual riding or driving time).

Type of Activity: Out-of-class project

Name of Activity: Transportation--Driving a Bus

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed: Reading transportation schedules

Concepts Involved: Reading tables, addition of decimals

Objectives:

1. The student will plan a trip, using a mileage table to determine place of departure and destination.
2. Using transportation schedules, the student will determine the times of departure and arrival and the actual driving time.
3. Using the mileage rate sheet, the student will determine the money earned by the driver.

Career Application: Bus driver

Time to Allow for Completion: Two weeks

Type of Student Involvement: Individual

Materials: Copies of mileage tables and mileage rate sheet

Costs Involved: None

Needs Approval: No

Teacher Activities: Make copies of the mileage table and the mileage rate sheet

Outline of Project: The student will plan a trip, using the mileage table given him to determine place of departure and destination, and using transportation schedules (obtainable from Greyhound) to determine the times of departure and arrival and the actual driving time for his planned trip. From the mileage sheet, he can determine the distance driven and, using this. can determine from the mileage rate sheet can find how much money the driver would earn on the trip.

Type of Activity: Out-of-class project

Name of Activity: Math Fair

Courses: Math 7, Math 8

Levels: I, II, III

Concepts Needed:

Concepts Involved:

Objectives:

1. Creation of interest in careers relating to mathematics.
2. Stimulation of curiosity which leads to research outside the classroom.
3. Development of a logical procedure of thought, paramount to the completion of a math career-oriented project.
4. Exhibition of projects, directly or indirectly related to mathematics.
5. Understanding of a project through explanation.
6. Improvement of ability to work with classmates in group projects.

Career Application: Explained in the outline of the project.

Time to Allow for Completion: Suggested calendar follows the outline of the project.

Type of Student Involvement: Individual and groups of two students

Materials: None

Cost: None

Needs Approval: Check with school administration

Teacher Activities: Individual teachers

1. Teacher involvement and interest is the most integral factor determining the success of a Career Oriented Math Fair.
2. Students will mirror their teacher's attitude of curiosity, interest, and involvement.
3. Teacher should be totally involved.
4. Teacher should be prepared to offer a list of possible projects with a brief explanation of development. (This list will be provided by the committee.)
5. Since it is beyond the limits of one teacher to undertake the effort of developing a Career Orientation Math Fair, it is suggested that a committee of three teachers direct the fair.
6. All mathematics teachers must be actively concerned in the success of the fair. They should stimulate interest and curiosity and steer the student in the right direction for more information dealing with his project.
7. The teacher should frequently remind the students of progress report dates and final completion dates of the projects.

Committee

1. A committee of a minimum of three mathematics teachers will be the directing force behind the entire Career Orientation Math Fair. The remainder of the mathematics department will act as vectors of stimulation in individual classrooms.

2. The committee will make up a calendar of dates leading up to the conclusion of the fair.

3. All projects will be turned in to the classroom teacher who will forward them to the committee.

4. The committee will grade the first progress report and final notebooks. The first progress report will be graded on the basis of the proposed project.

5. The first project check will be made by the committee in the month of March (approximately). All finished and unfinished projects are to be turned in at this time. (Projects will be tagged and placed in an area of the committee's choosing.) The projects will be given a letter grade. The evaluation, at this time, will be based on neatness of project, adherence to original plan, and time and effort project reflects. The committee should be lenient with grades so student will also make suggestions for changes and modifications of poorer projects.

6. Completed projects will be due about the 29th week. They will be tagged and placed in an area of the committee's choosing.

Outline of Project:

1. Teachers will be notified by the committee via bulletin concerning the fair.

2. Teachers will be notified by the committee of the type of grading scale that will be employed.

3. All accelerated (Level III) classes will be required to submit individual projects.

4. Teachers will be provided with a list of possible projects by the committee.

5. No more than two students per project will be allowed.

6. The student must have a working knowledge and understanding of the project he submits.

7. Teachers will be notified by the committee of the progress report dates and final completion dates.

8. No more than two similar projects will be allowed. Teachers should encourage variety through student research. Neatness of projects is a must. Untidy projects will be rejected by the committee.

9. Each project must be accompanied by a statement of the career application and a report about the career involved.

10. The best projects will be displayed in an area designated by the committee.

11. It is recommended that the best project and its student designer be written up in the school newspaper and the local newspaper.

Suggested Calendar for the Fair

Fifth Week

Introduction by math teachers to arouse student interest and enthusiasm.

Eighth Week

First progress reports are due. A grade will be given on topic choice and statement of intention.

Tenth Week

Second progress reports are due. Preliminary research should be completed, and student should understand his project.

Fifteenth Week

Final progress report is due. All research should be completed. A grade will be given.

Eighteenth Week

First check of the beginning of the rough draft of the report.

Twenty-second Week

Final check of the rough draft of the report. A grade will be given.

Twenty-fifth Week

Students are to start their projects. Neatness must be stressed.

Twenty-eighth Week

First check of projects.

Twenty-ninth Week

Final check of projects by the committee. A grade will be given. Final reports must also be turned in at this time.

Thirtieth Week

The best projects selected by the committee will be put on display in an area designated by the committee.

Type of Activity: Out-of-class

Name of Activity: Career mathematics study

Courses: All

Levels: All

Concepts Needed: The student should know what career or field he wants to enter

Concepts Involved: Mathematics is used in every field or career

Objectives: After completing this project, the student should become convinced that mathematics is used in every field or career

Career Application: All careers

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: If the teacher wants to go to the library, he might want to check with the staff to arrive at a date.

Teacher Activities: None

Outline of Project: This project can best be done after the pre-test on careers. The teacher should have the student research in the library the career or field he has mentioned on the pre-test. The object is to have the student list some examples of types of problems used by the people in the different careers. It is not really necessary that the student understand the problem, the object here is to show the student that mathematics is used in every occupation. The teacher can keep a file of the reports and refer to them throughout the year as examples of math in different careers.

Type of Activity: In-class (teacher directed)

Name of Activity: Running a Business

Courses: All

Levels: All

Concepts Needed: Percentages and arithmetic

Concepts Involved: The operating of a business

Objectives: The student should be able to give the amount of money intake to run a business at a profit

Career Application: Store management

Time to Allow for Completion: 30 to 50 minutes

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: The teacher will explain the problem to the student

Outline of Project: This problem is designed to show the student some of the factors involved in running a business. Suppose a man wants to start a business. He finds a store to rent for $500 a month. His initial out-lay for stock is $20,000. He has calculated that for every $100 of material he sells he will make 65% profit. The man has a few other expenses--$100 a month for utilities, $100 a month for advertising, $200 a month for employees, and $400 a month for other expenses. The question is, how much must the man sell to show a profit? Don't forget the owner's salary. He plans to pay himself $10,000 a year. (He also must replace stock that he has sold.)

Type of Activity: Out-of-class

Name of Activity: Finding a Job

Courses: All

Levels: All

Concepts Needed: None

Concepts Involved: What are the requirements needed for a specific job

Objectives: The student should be able to state the requirements of the specific career he wants to pursue. He should also be able to give some of the details about the job, such as salary, advancement.

Career Application: All careers

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: None

Outline of Project: The student should be instructed to look for a job. The student should take the job listed on the pre-test, look in the paper, make calls, and actually talk to the people who do the hiring for such a job. After finding the details of a specific job (including what mathematics is used) a report (either oral or written) should be made back to the classroom. The teacher can make good use of these reports (if written) and they should therefore, be kept on file for future reference.

Type of Activity: Out-of-class (student directed)

Name of Activity: Salaries

Courses: All

Levels: All

Concepts Needed: How to make a bar graph

Concepts Involved: The amount of earning power of different occupations.

Objectives: The student will become aware of the salaries associated with different professions

Career Applications: All

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: None

Outline of Project: The student should be instructed to find the average salaries of different professions. These could be obtained by looking in the newspaper, making calls to companies, or asking somebody in the profession. The results of such a survey should be graphed on a bar graph (occupation vs. maximum salary or average salary or maximum starting salary) so the student could readily see the wide range of salaries.

Type of Activity: Out-of-class (In-class discussion)

Name of Activity: Unusual Careers

Courses: All

Levels: All

Concepts Needed: None

Concepts Involved: Unusual jobs do exist

Objectives: The student should be better informed as to some of the more unusual careers in existence.

Career Application: All

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: The teacher should give a short talk on the topic to start the student out.

Outline of Project: The teacher should have the student do a study of unusual careers (the strangest job they can think of, e.g., a bowlers' photographer, a flag pole painter, a seal trainer, a fishing pole designer). The student should try to contact a person in the field they choose (if they can) and learn the special requirements and how one gets into the field.

Type of Activity: Out-of-class (In-class discussion)

Name of Activity: The Brown Banana (jobs that will not exist)

Courses: All

Levels: All

Concepts Needed: None

Concepts Involved: None

Objectives: The students should have a better idea of what jobs not to plan for or jobs that will not exist 10 to 20 years from now.

Career Application: All

Time to Allow for Completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: The teacher should hold a short class discussion of the topic

Outline of Project: Machines have done and will continue to do away with many jobs. The student's project is to do a study of jobs that now exist but will not exist 10 to 20 years from now. To start this off, the teacher can give some examples of jobs that have been destroyed or shortly will be (e.g., a fireman on a train, assembly lines, blacksmith). Each student should pick such a job or career and write a short paper including the qualifications for the job, amount of money made in the job and the reason why it will not exist in the future. If the teacher wishes, she can have each student list a number of these jobs.

Type of Activity: Out-of-class (In-class discussion)

Name of Activity: Jobs of the Future

Courses: All

Levels: All

Concepts Needed: None

Concepts Involved: None

Objectives: The student should realize that there will be jobs available to him that do not exist now.

Career Application: All

Time to allow for completion: One week

Type of Student Involvement: Individual

Materials: None

Costs Involved: None

Needs Approval: No

Teacher Activities: The teacher should hold a short discussion of the topic.

Outline of Project: The students should like this assignment because they don't have to do any research and they can let their imaginations "run wild." Each student should write a short paper on a career or job that will exist 10 or 20 years from now but, does not exist now. The teacher can give an example of a class 20 years ago who was given the same assignment. Some jobs that exist now that didn't exist 20 years ago are: computer programmer, astronaut, color TV repairman.

Type of Activity: In-class (teacher directed)

Name of Activity: Computer Usage

Courses: All

Levels: II, III

Concepts Needed: Arithmetic, Algebra (depending on the grade and level)

Concepts Involved: Computer programming

Objectives: Given a problem, the student should be able to write and run a program needed to solve the problem

Career Application: Computer programmer

Time to Allow for Completion: One to three weeks

Type of Student Involvement: Individual

Materials: Computer terminal

Costs Involved: None

Needs Approval: No

Teacher Activities: A teacher must know how to program a computer.

Outline of Project: The project is to teach the student how to program the computer. There are slides and television programs on this topic. The amount of time spent is up to the teacher. It is, however, recommended that the teacher spend at least a week on this. This project has two advantages: (1.) It will introduce the computer to the child, and (2.) The teacher will be able to use the computer to aid in the instruction of other concepts.

A meaningful experience can be gained by all grade levels depending on the teacher's experience with the computer.

SOUTH-WESTERN CITY SCHOOLS

Math

You the Consumer and Big Business

The feature of this unit is that consumer's education is not isolated but integrated in the math and careers programs. Included also, are clearly defined evaluation techniques.

Guideline Directions for Implementation

"You, the Consumer, and Big Business Unit"

1. This unit is designed to be utilized fully or partially at the teacher's discretion.
2. The intention of the authors is for each phase to choose only those objectives that they wish to meet.
3. Which and how many objectives will be taught and which suggested implementation activities will be used are at the discretion of the phase.
4. Evaluation will be made by pre-testing and post-testing only those objectives chosen by the phase.
5. The list of suggested test items is included solely as a teacher resource, not as a test for the students.
6. The phase may reword the test questions to meet the needs of their students as long as the new test questions keep with the guidelines of the objective. (Note Math Teachers: It is up to you to decide the degree of difficulty that you wish to use and substitute the appropriate numbers.)
7. Answers for all test items are included after each test item.
8. Analysis of the pre-test and post-test can be done by simply taking the average of the student's scores within the phase as opposed to an item by item analysis. (Send these pre- and post-test results along with the "Numbers" of the objectives that were used, i.e., "We used objectives 1, 3, 5, 6, 7, and the average score was 58% correct.")
9. Any deletions or additions that the teachers wish to make to the list of activities is certainly in the best interest of student learning in this unit.
10. This unit is meant to be broad and flexible--Implement it to meet the needs of your phase.

Test Items:

1. T The cost to a department store for a 10-speed bicycle was $45.00, the retail price was $67.50. What was the amount of mark-up? $22.50 What was the per cent of mark up? 50%

TCC If a department store clerk receives a bicycle at a cost of $45.00 and sells it at a retail price of $67.50, how much did he mark up the bicycle?______What was the per cent of mark up?______

2. T A 17-ounce can of brand X peas costs 34 cents. A 30-ounce can of brand X peas costs 45 cents. What is the price per ounce of the 17-ounce can?______30-ounce can?___Which cost is greater per ounce?______

TCC If a grocer has a 17-ounce can of peas on his shelf for 34 cents and a 30-ounce can for 45 cents, what would be the cost per ounce of the 17-ounce can to his customer?______30-ounce can?______Would the 30-ounce or the 17-ounce can be a better buy?______

3. T The cost of a car is $4000. A loan company charges 6-1/2% interest per year for three years. What would the amount of interest be at 6-1/2% for three years? $780

TCC If you borrow money from a loan company consultant to buy your $4000 car, what would your amount of interest be at 6-1/2% interest per year for three years?

4. T If your bill from a department store is $100, and the finance charge is $1.50, what is the monthly rate of interest? 1-1/2% What would the yearly rate be? 18%

TCC If your bill from a department store is $100, and the finance charge is $1.50, what monthly rate of interest did the credit department supervisor use to compute your charge?______What would the yearly rate be?______

5. T One share of stock in a company costs $4.50, how many shares could you buy for $900? 200 shares

TCC If a person lets his stock broker spend $900, how many shares of stock could he buy in a company which sells its stock for $4.50 per share?______

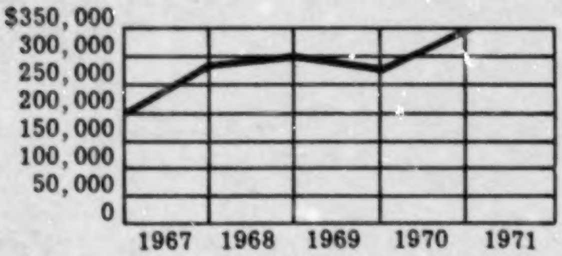
6. T. Fill in the following chart for this average family's budget by computing what percent each area would be of the total budget.

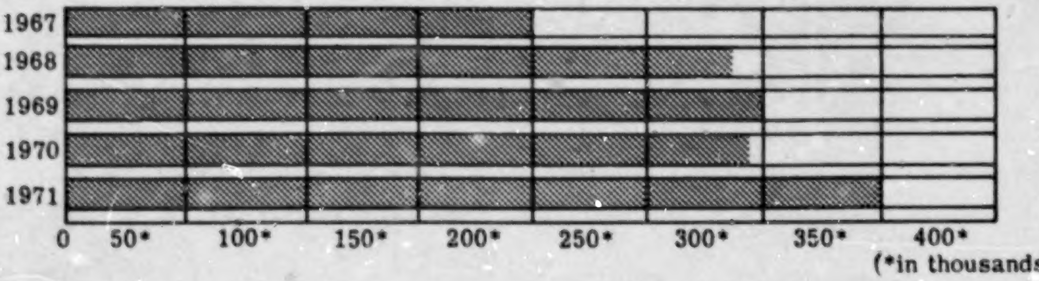
Total Budget: $10,000	Food: $1500	Clothing: $1000	Shelter: $2000	Transportation $1500	Taxes: $1200
Percentage:	15%	10%	20%	15%	12%

TCC If you were a tax consultant asked to help figure your family's budget, how would you fill in this chart with the percentages spent on each item?

7. T. The profits of a company in the past five years were: 1967-$200,000 1968-$275,000 1969-$300,000 1970-$290,000 1971-$350,000

Make a scale and place the preceding data on a line graph and a bar graph.





TCC If you were a statistician, how would you place the following data of your company's profits on a line and a bar graph? 1967-$200,000 1968-$275,000 1969-$300,000 1970-$290,000 1971-$350,000

8. TCC Name a career in which the duties include calculating interest on credit purchases. (Answer: Bookkeeper, Clerical Personnel.)

T Given the following information, calculate the amount of interest charged on each credit purchase.

Amount of Credit Purchase	% Interest Rate	Amount of Interest	Answers:
a. $ 5.67	1.5%	________	a. $ .09
b. 186.27	.5%	________	b. .93
c. 88.45	2.3%	________	c. 2.04
d. 27.89	12 %	________	d. 3.35
e. 1,352.00	5.5%	________	e. 74.36

9. T Given the following information, how much more will each house cost than the price quoted by the real-estate broker?

	Price Quoted	Amt. of Downpayment	% Yearly Interest on Mortgage	Length of Time of Mortgage
House A	$23,500.00	$ 1,175.00	7.75%	30 years
House B	28,900.00	2,023.00	7.75%	30 years
House C	30,000.00	3,000.00	7.75%	20 years
House D	35,000.00	4,250.00	7.75%	25 years
House E	59,500.00	11,900.00	7.75%	25 years

Differences in price and what you pay:
House A ________________
House B ________________
House C ________________
House D ________________
House E ________________

Answers:
House A $51,905.64
House B $32,349.60
House C $41,840.00
House D $59,578.25
House E $82,225.00

(Formula: Difference - Unpaid balance X yearly interest rate X number of years of loan (mortgage).

TCC Name two careers involved in financing or selling a home. (Answer: Real estate broker, bank or savings and loan executive.)

10. T Given the following information, calculate the unit price of each item to the nearest product cent.

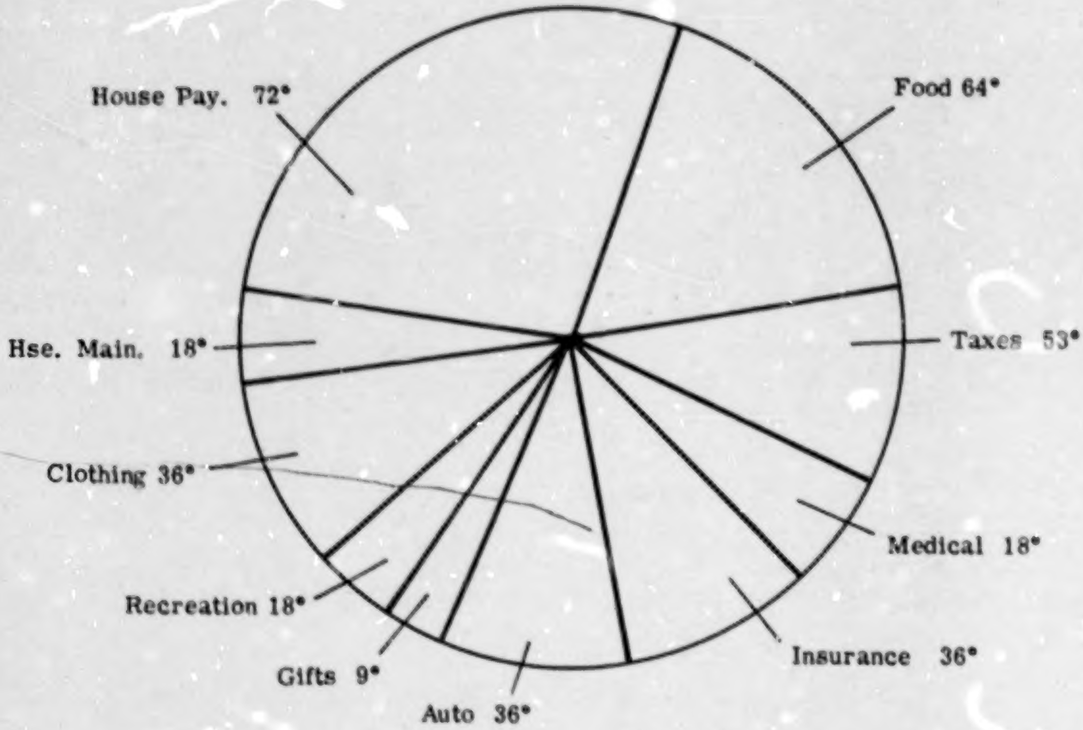
	Price	Amount in Container	Unit Price per Unit of Measure
Hunts Tomato Paste	.29¢	12 ounces	a.______ Per Ounce
Heinz Tomato Paste	.33¢	12.5 ounces	b.______ Per Ounce
Food Club Tomato Paste	.30¢	13 ounces	c.______ Per Ounce
Pepperidge Farm White Bread	.69¢	2 lbs.	d.______ Per Ounce
American Heritage White Bread	.41¢	1 lb. 4 oz.	e.______ Per Ounce

Ans:
a. $ .04
b. $ .03
c. $ .02
d. $ .02
e. $ .02

TCC Name one career in which responsibilities include influencing whether to unit price grocery items. (Answer: Administrator on consumer protection agency, grocery store manager or owner.)

11. T Given the following monthly budget for a family of four, construct a circle graph to represent this information.

Expenses	Fraction of total money available
Food	3/20
House Payment	1/5
House Maintenance	1/20
Clothing	1/10
Recreation	1/20
Gifts	1/40
Auto Expenses	1/10
Insurance	1/10
Medical	1/20
Taxes	53/360



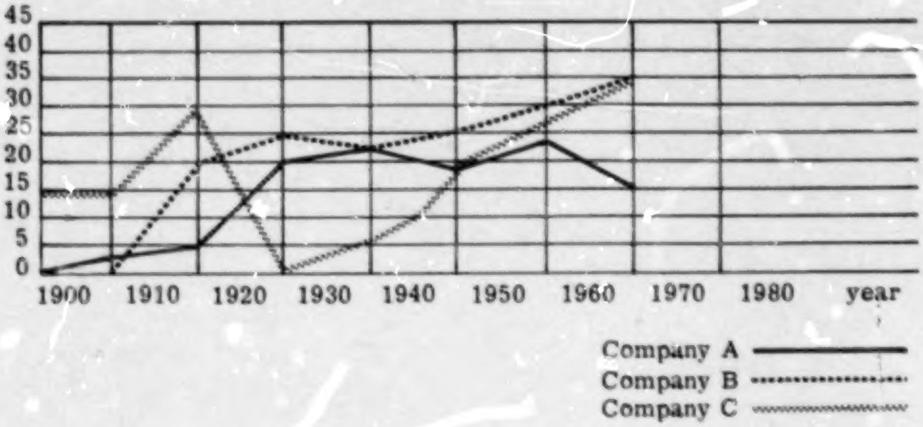
TCC Name one career in which responsibility it is to aid families in budgeting their finances. (Answers: Accountant, Finance Counselor)

12. T Given the following information, find what percent the overhead is of the total company budget.

Company	Overhead	Total Budget	%Overhead	Answers	
A	$ 500	$ 750	________	A	66.6%
B	850	1,700	________	B	50 %
C	714	2,100	________	C	34 %
D	4,408	5,800	________	D	76 %
E	22,720	28,400	________	E	80 %

TCC Name two careers involved in aiding companies in their budgeting and financial matters. (Answers: Controller-Accountant, Corporate Lawyer (or tax lawyer).

13. T Given the following graph, answer the questions below:



1. Which company had the greatest increase in profit during a 10-year period?

2. In 1930, the best company to be a stockholder in was __________ .

3. 1970 and 1910 show two companies having the same amount of profits. They are _______ and ________ .

4. The profits of Company A in 1950 were _________.

5. The profits of Company C in 1930 were _________.

Answers:
1. B
2. B
3. A and C
4. 20 Million Dollars
5. 2-1/2 Million Dollars

TCC Name one career whose responsibilities include maximizing a company's profits. (Answers: Company controller, Tax Lawyer)

14. T Given the following information, calculate the percent increase from large quantity to small quantity buying of each item.

Item	Large Quantity	Small Quantity	% Increase in Price
Beans	$ .18 lb.	$ .54 lb.	a.________
Potatoes	.05 lb.	.25 lb.	b.________
Beef	.48 lb.	1.44 lb.	c.________
Pork	.35 lb.	1.05 lb.	d.________
Laundry Detergent	10 lb.	.80 lb.	e.________

Answers:
a. 200%
b. 400%
c. 200%
d. 200%
e. 700%

Formula:
$$\frac{\text{Small quantity Price} - \text{Large quantity Price}}{\text{Large Quantity Price}}$$

TCC Name one career whose tasks are to control large quantity and small quantity pricing. (Answer: Accountant on Price and Wage Control Board)

15. T Which of the following people would play a part in the manufacturing of sleepers for children? Underline your choices.

Physician
Garment Worker
Plastic Surgeon
Fire Prevention Expert
Home Economist
Clothing Designer

Answers: Garment Worker
Fire Prevention Expert
Clothing Designer

16. T What is "planned obsolescence"? (Answer: That aspect of production which designs a product to last a specific amount of time. In the case of a warranty or guarantee, the manufacturer will keep well within this time period.)

TCC Which of the following people would need to know directly about "planned obsolescence"?

Farmer
Design Engineer
Forest Ranger
Cost Analyst
Antique Dealer

Answers: Design Engineer
Cost Analyst

17. T What does Underwriter's Laboratory do?
(Answer: Approve products from an electrical safety standpoint.)

TCC Of the following occupations, which ones would UL need to hire?

Home Economist	Answers: Statistician
Statistician	Electrician
Organist	Chemist
Electrician	
Policeman	
Chemist	

18. TCC If the following household items stopped working who would you call to fix it?

1. Gas Furnace________	1. Furnace Repairman
2. Electric Range__________	2. Kitchen Appliance Repairman
3. Window Air Conditioner_______	3. Company Repairman
4. Washing Machine__________	4. Company Repairman
5. Blender_________	5. & 6. Small Appliance Repairman
6. Coffee Maker _________	

19. T Nestle's Quick is made from sugar, cocoa, lecithin, and salt. Which ingredient makes up the most of this product? The least?
(Answer: Most is Cocoa, least is lecithin.)

TCC True or False: 1. A baker of bread must concern himself with the proportion of ingredients in his recipe.
2. A meat packer uses the whole hog in making lunch meat.

(1. True 2. False)

20. T Why is it important to have a clearly worded caution label on a hazardous product?

(Answer: To prevent accidents and determine anecdote.)

TCC If you swallowed a drain cleaner that contained lye, would the doctor made you vomit? Why or why not?

(Answer: No. Because of its caustic effect.)

21. T Is there any danger in taking patent (non-prescription) medicine? (Answer: Not if directions are followed.)

TCC If you were sick and taken to an emergency room, why would the doctor, nurse, or squadman ask if you had taken any medicine recently? (Answer: Because there are many medicines which could affect the diagnosis and/or treatment of your problem.)

22. T Name a toy you would buy for a three-year old. Why would you buy it?

(Answer: Tricycle. Because it will provide good healthful exercise.)

TCC Why would a person trained in child-development be hired by a toy manufacturer?

(Answer: To insure that the toys produced are safe, educational, and fun for children of various ages.)

23. T True or False: A researcher tester and a consumer tester do the same thing for the same purpose.____________

24. T Define two of the following terms:

1. MSG	Answer: 1. Monosodium Glutamate
2. MDR	2. Minimum Daily Requirements
3. RDA	3. Recommended Daily Allowance
4. USDA	4. United States Department of Agriculture

TCC Why would a nutritionist or dietitian have need of the above terms?

(Answer: They are essential in discussing nutrition and diet.)

25. TCC Why would a company hire a product designer to be concerned with the safety factor of their product?

TCC Why would a company who makes a product be concerned with the results of an independent safety tester?

(Answer: The safety tester will determine the product's safety objectively, and his results may influence sales.)

26. T Briefly describe the difference between a "bull market" and a "bear market."

(Answer: A bull market is where the demand for and price of stocks is going up, and a bear market is just the opposite.)

TCC You are a stock broker and a client has asked you to give him a brief written description of a "bull market" and a "bear market." Give your answer below.

27. T Briefly define the term "price freeze."

(Answer: Prices cannot be raised without governmental consent.)

TCC How would an economist define the term "price freeze"?

28. T Name two organizations formed to help consumers.

(Answer: Consumer Protection Agency and the Better Business Bureau.)

TCC You want to work for one of the several organizations that helps the consumer. List two organizations that you might apply to for a job.

29. T What does your broker have to do when you ask him to purchase stock for you?

TCC (Answer: 1. Contact the proper exchange and make the transaction.
2. Collect the money from the buyer.
3. Pay the exchange the money owed.
4. See to it that the company sends you the stock certificates.)

30. T List three types of insurance and tell how the purchase of each might someday help you.

(Answer: Life, fire, automobile. How they help: the answer is obvious.)

TCC List three types of insurance that an insurance man might try to sell you and the coverage offered by each.

31. T Write a paragraph explaining how even though ancient man was able to take care of all his needs by himself we now have "job specialization."

(Answer: As technology advanced and man's needs and desires increased, it became advantageous to specialize. Note: answers may vary. Point out to students how difficult it would be to make his own TV set.)

TCC Even though man can do everything for himself if he had to, write a paragraph telling why people like butchers, line workers in factories, watch repairman, do just one thing.

32. T List four types of shelter you could choose to live in.

(Answer: Apartment, Condominium, House, House-Trailer, Hotel, and so forth.)

TCC List four types of shelter that a realtor may offer to you.

33. T Check the statement that has the gimmick in it.

(X) a. Buy now and there will be no payment until spring.
( ) b. The price of this stove is $395.00.
( ) c. General Electric has introduced this new stove.

TCC Check the actor you think would present the best image for an electric shaver commercial.

( ) a. A musician
(X) b. A football player
( ) c. A teacher

34. T Put an F in front of the statement if false. Put a T in front of it if True.

(F) A small claims court would hear a $500 damage suit.

TCC True or False - (F) A judge of the U.S. Supreme Court would hear a case in the small claims court.

35. T Check the agency that you would use if you wanted to know the honesty of a dealer before making a purchase.

( ) Small Claims Court
(X) Better Business Bureau
( ) Bureau of Consumer Complaints

TCC What is Ralph Nader's role in consumer protection?

(Suggested possible answer: Ralph Nader has brought pressure on the government for better consumer protection. He also has volunteer groups in large cities to work for consumers and hear complaints.)

36. T Match the name with the famous product.

1. (G) Henry Ford
2. (C) Firestone
3. (B) Kaiser
4. (F) Levi Strauss
5. (E) Carnegie
6. (D) Rockefeller
7. (A) Dupont
8. (H) Busch

A. Plastics and Chemicals
B. Aluminum Products
C. Tires
D. Oil Products
E. Steel Products
F. Casual Clothing
G. Automobiles
H. Beer

37. T Match the product with the corporation.

TCC (D) IBM
(E) General Foods
(A) General Motors
(B) Westinghouse
(C) Bell Telephone

A. Motor Cars
B. Electrical Appliances
C. Communications
D. Computers and Office Machinery
E. Food Products

38. T Define the following types of business.

a. Private Ownership
b. Partnership
c. Corporation

Answer: a. One person owns a business.
b. Two people (or families) pool their money, own a business.
c. Money is provided by selling stocks to many people. These stockholders own the business.

TCC Would a personnel manager be employed in a small privately owned business?

Answer: No. A privately owned business would not need a personnel manager.

39. T List five businesses in your community and tell in what ownership category they fall.

Answer: Answers would vary. Each teacher should judge the validity of individual answers.

40. T Name two public opinion polling companies that are well known.

Answer: Gallup and Harris Poll.

TCC If you were a poll-taker, name two companies you might work for.

Answer: Gallup and Harris Poll

41. T Name two articles under the department of the Feature Editor that appears each month in Consumer Reports.

TCC Answer: Any two of these would be acceptable:

a. Work in Progress
b. Follow-up
c. Letters
d. The Docket
e. Record Reviews
f. Movies and Ratings

42. T List the mass media. Answers: Newspapers, radio, television, magazines.

TCC List four occupations dependent on the mass media.

Answer: Any four of these would be acceptable: Newspaper reporter, TV and Radio announcers, broadcast technicians, disc jockey, video-camera operators, newspaper editor.

43. T Briefly describe how a sociologist would make use of a questionnaire.

TCC Suggested Answer: A sociologist might use a questionnaire for any of these reasons:

1. Determine social trends based on locational data, i.e., income, home owner, occupation, area of nation in which they live.

2. To compare one society or environment with another over a period of time.

3. Give data to market researchers to determine consumer behavior on products and buying potentials.

44. T Which of the following people would most likely use the transfer technique of propaganda?

a. Disc-jockey Answer: b. Politician
b. Politician
c. Consumer

45. T List one responsibility the consumer must fulfill before he receives full warranty protection from the product manufacturer and state why this must be done.

Answer: Fill in warranty registration within the specified time. Reason: inventory purposes, keeping track of date purchased (frequently a questionnaire is included to determine consumer practices).

TCC You are the manufacturer of the "hot comb" product. What do you require the consumer to do before he receives full warranty protection and why?

Answer: See above.

46. T Match the following broad categories of careers with their definitions:

__A__ business

__C__ commerce and trade

__D__ industry

__B__ traffic

A. Those engaged in the purchase or sale of commodities or in related financial transactions.

B. Those engaged in the operation of public carriers, such as railroads, ships, bus lines.

C. Those engaged in the exchange and transportation of commodities.

D. Those engaged in producing commodities, especially by manufacturing or processing, on so large a scale that problems of labor and capital are involved.

TCC You are involved in big business: Briefly describe the areas of activity in which the commerce and trade, industry, and traffic personnel are involved.

Answer: See above.

47. T List three ways in which a public relations worker has made his company appealing through a given advertisement.

TCC You are a public relations worker for a company which produces dog food. State three ways you would make your product appealing in an advertisement.

Answer: 1. Show an appealing dog with the product
2. Catchy slogan or caption
3. Tell what your product has that others don't

48. T State in one sentence how a newspaper can be two-faced, after reading the article published in the magazine "Changing Times," July, 1972 issue. (Refer to article immediately following this section.)

Answer: A newspaper can be two-faced by exposing fraud in news stories, while carrying advertisements for the fraudulent company.

TCC You are the presidential consumer adviser in the article "Newspapers can be two-faced." Why do you think newspapers can be two-faced?

Answer: It exposes fraud in the news stories, but also carries advertisements for the fraudulent company.

49. T Name three ways the Federal Trade Commission polices the marketplace.

Answer: 1. Companies have money-back guarantees
2. Allows cooling-off periods
3. Prevents companies from selling flammable carpets.
(Answers may vary)

TCC You are employed by the Federal Trade Commission. Name three ways in which you police the marketplace.

Answer: See above.

GOAL: To clarify and extend the students' concept of the individual consumer and his relationship to big business.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
1. Given the cost of a piece of merchandise and the retail price, the student will compute the amount of mark-up and the per cent of mark-up.	a. Discuss mark-up, [illegible] price, and how to find percent of mark-up.	a. Recalling Similarities Differences	a. Math		
	b. Invite a representative from a department store to come to the classroom to explain what costs make this necessary.	b. Recalling Making Choices Questioning Inferring Causes Inferring Effects			b.
	c. Have students set up a display of items with cost price and retail price. Allow students to compute percent of mark-up. Play simulation game with the children as shoppers.	c. Recalling Making Choices Inferring Causes Inferring Effects		c.	
Correlates with SWCMS #18 and 48	d. Review subtraction and how to find percent by showing film-strip, overhead, worksheet, or lecture.	d. Recalling Similarities Differences			
	Correlating Careers: Buyer for department store, sales clerk, department manager.				
	Career Clusters: 2, 12.				
2. The student will compute the price per unit on two different size cans of the same item and compare the difference in price.	a. Visit a grocery store and look at various foods and prices.	a. Observing Similarities Differences	a. Math		a.
	b. Have students bring in empty cans, boxes, and packages to use in figuring unit price.	b. Observing Similarities Differences Making Choices		b.	
	c. Make a display or a bulletin board with various ads collected from newspapers and packages and boxes.	c. Making Choices Recalling Similarities Differences		c.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
Correlates with SWCMS #24 and 25	d. Review division with discussion, filmstrip, and worksheets.	d. Recalling			
	Correlating Careers: Grocer, Stock Boy, Cashier				
	Career Cluster: 2				
3. Given the principle rate and time, the student will compute the amount of interest (within $2) on a car loan.	a. Have students discuss and learn the formula for interest (I=PRT). Work problems using the formula.	a. Recalling	a. Math		
	b. Play simulation game with loan company, bank, car dealer, and buyer to set up various problems.	b. Inferring Causes Inferring Effects Recalling Making Choices Questioning Similarities Differences		b.	b.
	c. Have children collect ads from newspapers giving interest rates on loans.	c. Making Choices			c.
Correlates with SWCMS # 47 and 50	d. Review and have discussion about changing percent to decimals and multiplying with decimals.	d. Recalling Making Choices			
	Correlating Careers: Car dealers, loan consultant, bank loan manager, credit union loan consultant.				
	Career Cluster: 2				
4. Given a credit card statement, the student will compute what percent of the total bill the monthly finance charge	a. Let students make billing cards of their own rates of interest and exchange to let other students solve for the given rates.	a. Recalling Making Choices	a. Math	a.	a.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
4. Continued would be, and what the yearly rate of interest would be to within 1%.	b. Review division and operations with percents with the overhead projector, ditto, or filmstrip.	b. Recalling			
	c. Have students list the various things which people might buy on installment plan. Discuss other ways of financing purchases (loan company, bank, layaway, credit union.)	c. Recalling Making Choices Simulation Differences			c.
	d. Have a few students visit the credit department store and make a report or video tape of how the business is conducted.	d. Observing Making Choices Questioning Inferring Causes Inferring Effects			d.
	Correlating Careers: Computer operator, finance manager, billing clerk, credit department employees.				
	Career Cluster: 2				
5. The student will divide to determine the number of shares of stock he could buy in a given company with a given amount of money to the nearest whole share.	a. Have each student bring in the business section of a newspaper, and discuss stocks and how they are bought and sold.	a. Similarities Differences Making Choices Inferring Causes Inferring Effects	a. Math	a.	
	b. Play a simulation game where the students are the buyer, the seller, and the stockbroker on the floor of the stock market.	b. Recalling Similarities Differences Inferring Causes Inferring Effects Making Choices			b.
Correlates with SWCMS #25, 40 and 44	c. Invite a stock broker to talk to the students and bring samples of ticker tape.	c. Recalling Questioning			c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
	d. Present a lesson on changing fractions to decimals and dividing with decimals. Give a ditto or a worksheet.	d. Recalling			
	Correlating Careers: Stock broker, finance manager, stock exchange worker.				
	Career Clusters: 2, 12				
6. Each student will write a budget similar to that of his family for one month and compute the percents spent on food, clothing, shelter, transporation, and taxes, to the nearest 1%.	a. Each child will keep an account of his own personal budget for one week.	a. Observing Recalling	a. Math		
	b. Each child will bring in an estimate of his family's budget.	b. Recalling		b.	
	c. Show the filmstrip Percent - How and Why.	c. Observing Recalling			
	d. Have a parent come to the class to explain how he or she makes out the family budget.	d. Observing Questioning Inferring Causes Inferring Effects Making Choices			d.
Correlates with SWCMS #46 and 48	e. Discuss or review how to find what percent one number is of another.	e. Recalling			
	Correlating Careers: Tax consultant, accountant, finance manager.				
	Career Clusters: 2, 13				
7. Given the profits of a certain company in the last 5 years, the students will graph the rise or fall of profits on a line graph and a bar graph with 80% accuracy.	a. Discuss how to make a scale for graphs with given data, such as heights of children, basketball scores, etc.	a. Recalling Making Choices Ordering Inferring Causes Inferring Effects	a. Math		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
7. Continued	b. Show the filmstrip Graphs - Understanding and Using Them.	b. Recalling			b.
Correlates with SWCMS #57 and 58	c. Make a large graph on a bulletin board with the number of students' birthdays in the given months or number of students in different grade levels.	c. Making Choices Ordering		c.	
	d. Practice lessons on making graphs. Let each student collect his own data for a graph.	d. Recalling Making Choices Ordering			d.
	Correlating Careers: Statistician, accountant.				
	Career Clusters: 2, 13				
8. Given the amount of three credit purchases and the percent interest rate charged on each, the student will be able to calculate the interest due on each purchase with 80% accuracy.	a. From available tests and/or teacher-made worksheets give practice exercises of the type: 50% of 20 = ?	a. Recalling	a. Math		
	b. Set up a bookkeeping office for students to role-play the credit-buying system of a department store.	b. Recalling Making Choices Similarities Differences			b.
Correlates with SWCMS #47	c. Research the career of bookkeeper and clerical personnel in relation to job outlook, forecasted salary, responsibilities, and educational requirements.	c. Recalling Inferring Causes Inferring Effects			
	Correlating Careers: Bookkeeper, clerical personnel				
	Career Clusters: 2				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
9. Given the price of a house, the amount of his down-payment the length of his mortgage, and the yearly interest on his loan, the student will calculate the difference in what he will pay for the house and the price quoted on the house in five such problems with 80% accuracy.	a. Provide students with exercises from textbook or teacher-made worksheets in which they are to practice in meeting the math objectives # 44, 46 and 47.	a. Recalling	a. Math (Note: for more able students)		
	b. Provide students with exercises to practice formula for calculating difference of price quoted on a house and total money paid for a house. This will probably have to be done on teacher-made worksheets.	b. Recalling			
	c. Research careers of real-estate broker and bank executive in relation to their responsibilities job outlook, salary, and educational requirements.	c. Recalling Similarities Differences Inferring Causes Inferring Effects Making Choices			
Correlates with SWCMS # 44, 46, and 47	d. Have a speaker from a bank come to class to discuss mortgages, ease in acquiring loans, and other bank-financing aid provided to consumers. Correlating Careers: Real-estate broker, bank or savings and loan executive. Career Clusters: 2, 13	d. Questioning Making Choices			d.
10. Given five grocery-store items weighed in pounds and ounces and each items' price, the student will calculate the unit price of each item with 80% accuracy.	a. Provide students with exercises from text or with teacher-made worksheets to practice in meeting math objectives # 44 and 84.	a. Recalling	a. Math		
	b. Provide students with exercises on a teacher-made worksheet to compute unit pricing on several lists of comparable products.	b. Recalling			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
10. Continued Correlates with SWCMS # 84 and 44	c. Take students to a local grocery on a field trip and choose 10 grocery items. Compare three different brands of each item.	c. Observing Recalling Similarities Differences Ordering			
	d. Invite a speaker from the Consumer Protection Agency to speak about unit pricing.	d. Questioning Making Choices			
	e. Have students research the career of a grocery store manager or owner to find out responsibilities, job outlook, salary, and educational requirements. This may be done by IMC materials, by use of a speaker, or on the field trip.	e. Recalling Making Choices Similarities Differences			e.
	Correlating Careers: Administrator of Consumer Protection Agency, grocery store manager or owner.				
	Career Clusters: 2				
11. Given a total monthly budget for a family of four, including all expenses and the fraction of the total expense, the student will construct a circle graph to represent the data given with 90% accuracy.	a. Provide students with exercises from a text or teacher-made worksheets to practice meeting math objectives # 40, 58, and 100.	a. Recalling	a. Math		
	b. Have students work out personal budgets for one week, keeping track of all expenses and then compute the fraction of the total funds which each expense used up.	b. Recalling			
Correlates with SWCMS # 40, 58, and 100	c. Provide worksheets which give the same type of problem as in the correlated test question for practice.	c. Recalling			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATIONSHIP	AFFECTIVE RELATIONSHIP
11. Continued	d. Have students research and then discuss in class the careers of accounting and finance counselor in relation to responsibilities, job outlook, salary, and educational requirements. Invite a speaker to provide information. Correlating Careers: Accountant, finance counselor. Career Clusters: 2, 13	d. Recalling Similarities Differences Questioning Making Choices			d.
12. Given the total amount of money a company makes in one month and the total amount which the company uses in overhead (taxes, reinvested in company), the student will compute the percent of the company's intake which goes into overhead with 80% accuracy.	a. Provide exercises either with text or with teacher-made worksheets, give practice in meeting math objective # 48.	a. Recalling	a. Math		
	b. Research various careers involved in influencing corporate financing (for example, corporate tax lawyer, corporate accountant or controller) in respect to responsibilities, job outlook, salary, and educational requirements.	b. Recalling Similarities Differences Making Choices Inferring Causes Inferring Effects			b.
	c. Acquire and distribute data to students which give statistics related to company financing. Discuss details in setting up a business and the financial matters involved.	c. Recalling Inferring Causes Inferring Effects Making Choices			c.
Correlates with SWCMS # 48	d. Set up businesses in which students may role-play to discover the responsibilities inherent in working in a business. Correlating Careers: Controller, accountant, corporate lawyer, or tax lawyer. Career Clusters: 2, 13	d. Recalling Inferring Causes Inferring Effects Making Choices			d.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIV RELATION-SHIP
13. Given a line graph, which traces the profits of three companies over a specified period of time, the student will interpret the graph by answering questions comparing the different companies.	a. Provide students with exercises from text or from teacher-made worksheets which meet math objective # 55.	a. Recalling	a. Math		
	b. Acquire and distribute statistical data of companies and their profits. These are available to all stockholders and can be obtained on request. Discuss in class the term "profit."	b. Recalling Similarities Differences Ordering Making Choices			
Correlates with SWCMS # 55	c. Have students research the careers of company controller, accountant and tax lawyers. Discuss how they work to maximize the company's profits.	c. Recalling			
	Correlating Careers: Company controller, tax lawyer				
	Career Clusters: 2, 13				
14. Given a table of data on small quantity and large quantity costs of certain items, students will calculate percent increase when buying in small quantities for each item within 80% accuracy. In conjunction with this the stu-will name one career whose tasks are to control large quantity and small quantity pricing.	a. Provide students with exercises from text or teacher-made worksheets to practice meeting math objectives # 36, 43, and 48.	a. Recalling	a. Math		
	b. Provide exercises on practicing formula for percent increase (teacher-made worksheets).	b. Recalling			
	c. Discuss in class the role of accountants involved in the Price and Wage Control Board.	c. Recalling Inferring Causes Inferring Effects			
	d. Have students bring newspaper advertisements which compare small and large quantity prices of the same item.	d. Recalling Inferring Causes Inferring Effects Similarities Differences Making Choices			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
14. Continued	e. Visit local grocery to compare large and small quantity prices of the same item.	e. Observing Recalling Inferring Causes Inferring Effects Making Choices			e.
Correlates with SWCMS # 43, 46, and 48	Correlating Careers: Accountant on Price and Wage Control Board Career Clusters: 2, 13, 14				
15. Students will give verbal or written explanation of the importance of flame-retardant sleepware.	a. Get specimens of the following fabrics: 1. flame retardant flannel 2. plain cotton outing flannel 3. "Cuddle Cloth" brushed acetate and nylon knit fabric 4. Nylon Tricot 5. Cotton and polyester flannel or plain weave cloth. Also, get potholder made from nylon loops. After materials are assembled, cut fabrics into small, test size pieces. Having children work in small groups using a candle flame and stop watch, record the time required for each specimen to burst into flame. Record carefully all observations of change as well as elapsed time.	a. Observing Similarities Differences Ordering Inferring Effects	a. Science	a.	
	b. Construct a graph comparing the results of flame-retardant cloth and non-flame retardant cloth regarding the amount of time required for actual combustion.	b. Recalling Similarities Differences Ordering Inferring Causes Inferring Effects			b.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
15. Continued	Correlating Careers: Clothing designer, garment worker, fabric maker, lab tester, government inspectors, fire prevention experts, insurance agents, plastic surgeon.				
	Career Clusters: 4, 10, 12, 8, 14				
16. Students will describe the meaning of planned obsolescence and present examples of planned obsolescence found in big business.	a. Have students find three items in their homes that wore out beyond repair and were replaced. Try to find their approximate age and the part that went bad.	a. Recalling Inferring Causes	a. Science		
	b. Discuss what "planned obsolescence" is, include: 1. changes in standard sizes and models 2. change in appearance 3. change in materials specifications 4. cost cutting by using cheaper materials	b. Recalling Inferring Causes Inferring Effects			
	Correlating Careers: Design engineer, cost analyst, systems analyst, marketing researchers, production analyst.				
	Career Clusters: 10, 12				
17. Students will verbally describe the function of Underwriter's Laboratory.	a. Explain what Underwriter's Laboratory is and its function. Sample items are tested at random, and the product is given the UL seal of approval. The product manufacturer pays UL for this service.	a. Recalling Inferring Causes Inferring Effects	a. Science		
	b. Research the history of Underwriter's Laboratory, using the encyclopedia.	b. Recalling			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
17. Continued	c. Write to UL for information they might have for middle school students.	c. Questioning			
	d. Find items in your home that have the UL seal, and tell why you think it could be unsafe if it didn't have the seal.	d. Recalling Inferring Effects Making Choices			d.
	Correlating Careers: Product designer, product tester				
	Career Clusters: 10, 12				
18. Students will be able to name the kind of repairman to be called in case of breakdown of a particular household item.	a. Have students compile a list of household items in their home that could need repair. Have one student pose a breakdown in a particular item and another student name the repairman to call.	a. Recalling Inferring Causes Inferring Effects Making Choices	a. Science		
	b. Have repairman talk to students concerning his working conditions, hours, wages.	b. Making Choices Questioning			
	c. Have students verbally describe "the problem" with an appliance avoiding reference to the appliance. Rest of class tries to guess the appliance from the description.	c. Inferring Causes Inferring Effects Making Choices Questioning			
	d. Write a note to attach to the appliance you are going to leave at a fix-it-shop. Describe the problem in writing.	d. Recalling			
	e. Call several appliance repair shops and ask for prices of services (replacement of refrigerator gasket, replacement of dishwasher hose, new element in toaster, replace belt in washer.	e. Questioning Making Choices			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
18. Continued	Correlating Careers: Air Conditioning and refrigeration mechanic, oil and gas burner mechanics, small appliance servicemen, electrician, plumber, washer and dryer serviceman, gas appliance repairman. Career Clusters: 2, 5				
19. The student will, upon reading label of ingredients in a processed food such as lunch meats or bread, tell which ingredient makes up the largest portion of the product and which ingredient makes up the smallest portion of the product.	a. Using examples of labels from processed foods, show how the ingredients are, by law, listed in order of their proportions largest to smallest.	a. Recalling Observing Ordering	a. Science		
	b. Collect examples of several brands of the same food product. Compare proportions of ingredients. (Math people may want to compare prices.) Some interesting food products to compare: dry breakfast cereals, pancake flours, cake mixes of the same flavor, canned soups of the same kind, pre-packaged luncheon meats.	b. Similarities Differences Ordering Making Choices			
	c. In home economics class, prepare pancake mix or cake mix, package and attached directions for use in a later class. Be sure to include a list of ingredients in proportionate order. Correlating Careers: Butcher, baker, meat packer, portion control expert, nutritionist, meat inspector, dairy product producer, bulk milk dealer, feeder lot operator, livestock producer. Career Cluster: 4	c. Recalling Ordering		c.	c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
20. Student will identify warning labels on products that might be considered hazardous.	a. Find three hazardous products in your home. Write down the brand name, the ingredients (if given), and the recommended antidote.	a. Observing Recalling	a. Science	a.	a.
	b. Copy the caution or warning exactly as it appears on a product, and discuss the reasons for the exact wording.	b. Recalling Inferring Causes Inferring Effects		b.	b.
	c. Have students make a list of items that should be put out of reach of children because of their hazardous nature.	c. Recalling Inferring Causes		c.	c.
	d. Make a large wall chart or bulletin board of product labels from items in previous activity.	d. Recalling Ordering Grouping Making Choices		d.	
	Correlating Careers: Printer, logo designer, physician, nurse, emergency squadman, trial lawyer, judge, process server, clerk, bailiff, court reporter.				
	Career Clusters: 3, 8, 10, 12, 13, 14				
21. Students will identify the hazards in over-the-counter (non-prescription) medicines.	a. Have students research two non-prescription remedies or medicines. They should note brand, purpose, and directions or dosage. Also, note if there are any cautions for exceeding dosage or not following directions.	a. Recalling Observing Inferring Effects	a. Science		
	b. Share reports on above orally with class, and discuss reason for set dosage.	b. Inferring Effects Inferring Causes			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
21. Continued	c. Have a panel discussion (or open-class discussion) on the banning of non-prescription medicine commercials on TV and radio.	c. Recalling Inferring Causes Inferring Effects Making Choices			c.
	d. Divide class into as many groups as desired. Assign groups to research brand names according to remedy. Each group should make a display or contribute to a bulletin board. Some suggested categories are: relief from headache, stomachache, sinus and head cold, cough cures, laxatives, vitamins, all topical medicines.	d. Recalling Similarities Differences Inferring Causes Inferring Effects Making Choices			
	e. Debate: The United States is a nation of patent drug addiction.	e. Inferring Effects Inferring Causes Questioning			
	Correlating Careers: Physicians, nurses, emergency squadmen, first aid instructors, drug sales, chemist, clerks and cashiers.	Career Clusters: 2, 8, 10			
22. Students will verbally explain and demonstrate the three guidelines for the purchase of children's toys. 1. child-safety engineered (design) 2. durability of construction (materials) 3. appropriate for age of child (child development)	a. Invent the perfect toy. Award a prize for the over-all winner. The toy should have the three guidelines of the objective. It should be submitted in a colored drawing (to scale) and be clearly described in a paragraph.	a. Recalling Making Choices	a. Science	a.	
	b. Compile a list of children's toys and have students categorize them according to the age of the child, (such as 1-3, 4-6, 7-9, 10-12) with respect to appropriateness.	b. Recalling Ordering Grouping Labeling Making Choices			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	MOTOR RELATIONSHIP	PSYCHO-AFFECTIVE RELATIONSHIP
22. Continued	c. Conduct durability test on two different toys of the same type. Include tests for dropping, ability to withstand pulling, sturdiness of moving parts.	c. Observing Ineffing Causes Inferring Effects		c.	
	d. Write an advertisement for a magazine showing the three guidelines for the advertised toy in the ad.	d. Making Choices Inferring Effects	d. Language Arts		d.
	Correlating Careers: child development expert, toy manufacturer, retail toy sales, child guidance experts.				
	Career Clusters: 4, 10, 13				
23. Student will verbally give two advantages of one brand of a certain product over another brand.	a. Have students in small groups conduct a comparison. Test two brands of a food product for at least four qualities and report their findings to the class.	a. Similarities Differences Ordering Inferring Effects	a. Science	a.	
	b. Have students bring in packages of two different brands, make their preference on appearance alone, and give a reason.	b. Inferring Causes Inferring Effects Making Choices		b.	
	c. Have students prepare questionnaire for a certain product, asking brand name preferred and four criteria for the preference. Students will compile results and report to class.	c. Questioning Ordering Inferring Causes Inferring Effects			c.
	d. Have students bring in product container and find at least two beneficial features given on the product.	d. Inferring Effects Making Choices		d.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
23. Continued	e. Give students a list of features of products and have student name the type of product to which it is related. Correlating Careers: Consumer tester, statistician factory inspectors, research tester. Career Clusters: 2, 12	e. Recalling			
24. Students will define the following: pure, additive, calcium propionate, MSG, RDA, USDA, monoglycerides, diglycerides.	a. Prepare a bulletin board (or display) for illustrating where these terms can be found on package labels.	a. Recalling Ordering Grouping Labeling Making Choices	a. Science	a.	
	b. Have students research one of the items in the objective and tell of its connection with foods.	b. Recalling Inferring Effects Making Choices			
	c. Explain what would happen to certain foods without the use of calcium propionate, diglycerides, MSG.	c. Inferring Effects			
	d. Taste test. Eat a small piece of celery. Next, eat a piece which has been lightly sprinkled with MSG. Discuss the difference. Correlating Careers: Nutritionist, dietitian, chemist, government food inspectors. Career Clusters: 4, 8, 14	d. Similarities Differences Inferring Effects		d.	d.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
25. Student will name a way in which each item from the following list should be made safe: electric toaster clothes dryer child's pajamas painted crib refrigerator pudding in cans	a. Have students find out how toys can be made safe from a possible hazard.	a. Recalling Inferring Causes Inferring Effects	a. Science		
	b. Discuss ways that small electrical appliances should be constructed so as to be safe from shock hazard.	b. Recalling Inferring Effects	b. Science		
	c. Discuss ways appliances should be designed so as to be safe from hazards other than shock.	c. Recalling Inferring Effects	c. Science		
	Correlating Careers: Safety tester, product designer.				
	Career Clusters: 12				
26. The student will discriminate between a "bull market" and a "bear market."	a. Discuss stock market operations and the terms "bear" and "bull."	a. Recalling Similarities Differences Inferring Causes Inferring Effects	a. Social Studies Math		
	b. Game: "Stocks and Bonds"	b. Observing Recalling Making Choices	b. Language Arts		
	c. Distribute pamphlets from brokers and discuss them.	c. Similarities Differences Inferring Causes Inferring Effects			
	d. Collect "money" and pretend to buy stocks.	d. Making Choices			d.
	Correlating Careers: Stock brokers, stock market analyst, stock traders, statistician, accountant.				
	Career Clusters: 2, 12				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
27. The student will define the term "price-freeze."	a. Research President Nixon's Price Freeze (Phase I and II)	a. Recalling Inferring Causes Inferring Effects	a. Social Studies Language Arts		
	b. Have students obtain a store's list of prices and check to see if they meet the standards.	b. Recalling	b. Math		
	c. Discuss "inflation" and the part it plays in business and our everyday lives.	c. Recalling Inferring Causes Inferring Effects	c. Social Studies		
	d. Discuss penalties for breaking the price freeze regulations.	d. Recalling Inferring Effects	d. Social Studies		d.
	Correlating Careers: Economist, accountant, store manager, banker.				
	Career Clusters: 2, 12				
28. Students will name (list) two organizations formed to help consumers.	a. Discuss Consumer Protection Agency and Better Business Bureau.	a. Recalling Similarities Differences Inferring Effects	a. Social Studies		
	b. Have students contact BBB to find information on the reputation of a company.	b. Questioning Making Choices			
	c. Lecture on "bunko" tactics and laws.	c. Recalling Inferring Causes Inferring Effects			
	d. Make bulletin posters giving tips on how to spot bunko operations.	d. Recalling Inferring Causes Inferring Effects Ordering Making Choices		d.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
28. Continued	Correlating Careers: comparison pricer/ shopper, clerk, secretary, telephone operator, policeman, building inspector. Career Clusters: 2, 4, 14				
29. Each student will verbally explain what a broker has to do when you ask him to purchase stock.	a. Have broker explain his duties to the class and how the NYSE, ASE, and OTC markets work.	a. Similarities Differences Inferring Effects Questioning	a. Social Studies Language Arts		
	b. Have members of Security Exchange Commission explain the regulations that govern the actions of brokers.	b. Recalling Inferring Causes Inferring Effects			
	c. Make flow chart bulletin board showing how stock gets to purchaser.	c. Recalling Ordering		c.	
	d. Show films explaining the workings of the exchanges. Correlating Careers: Stock broker, banker, trader, accountant, treasurer, comptroller. Career Clusters: 2, 12	d. Recalling			
30. Each student will be able to list three types of insurance and explain why their purchase might be a wise investment.	a. Discuss the various types of insurance and their purpose (fire, home owners, auto, life).	a. Similarities Differences	a. Social Studies Math		
	b. Have insurance broker explain his duties and the types of insurance he sells.	b. Similarities Differences Inferring Causes Inferring Effects			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
30. Continued	c. Take a poll in your community to find out how many people have had times in their lives when they were glad they had insurance.	c. Recalling Observing Inferring Effects		c.	c.
	d. Have students do research to find out: 1) How many insurance companies there are. 2) How much difference there is in rates from various companies. 3) How "big" some insurance companies really are. 4) How insurance companies arrive at rates.	d. Recalling Similarities Differences Inferring Causes Inferring Effects Questioning			
	Correlating Careers: Statistician, insurance salesman, insurance investigator. Career Clusters: 12, 13				
31. Each student will write a paragraph explaining why there is now "job specialization" even though ancient man has shown that we could take care of all of our basic needs if we had to.	a. Discuss how people throughout history have been self-sufficient.	a. Recalling Inferring Causes	a. Social Studies		
	b. Make bulletin board, with a world map on it, showing various people throughout the world that are almost totally self-sufficient.	b. Recalling Similarities Inferring Causes Inferring Effects Ordering		b.	
	c. Visit a factory in your area to see how specialized some jobs are.	c. Observing Making Choices Inferring Causes Inferring Effects			c.
	d. Discuss Henry Ford, origin of the assembly line.	d. Recalling			
	Correlating Careers: Almost any modern career has some "job specialization." Career Clusters: 1 through 15				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
32. Each student will list four options on how to provide shelter for himself.	a. Discuss options: trailers, apartments, condominiums, houses (own/rent), hotels, and rent, buy or lease.	a. Recalling Similarities Differences Inferring Effects Making Choices	a. Social Studies Math		
	b. Have students compare cost and advantage/disadvantage of each.	b. Similarities Differences Inferring Causes Inferring Effects			
	c. Poll the class to see who lives how.	c. Recalling			
	d. Discuss the trend from urban to suburban and what is causing this. Is this trend reversing?	d. Recalling Inferring Effects Inferring Causes			
	e. Look at a population map, and discuss why people live where they do.	e. Observing Recalling Similarities Differences Inferring Causes Inferring Effects			
	Correlating Careers: Realtor, builder, banker, construction workers, plumbers, electricians.				
	Career Clusters: 5				
33. Each student will list five "gimmicks" or "come-ons" seen on TV, heard on the radio, or seen in print.	a. Discuss what is meant by "gimmicks" or "come-ons" and their effect on buying.	a. Recalling Inferring Causes	a. Social Studies Language Arts		
	b. The student will listen to a TV commercial and list "gimmicks" or "come-ons" in the commercial.	b. Observing Recalling	b. Social Studies Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
33. Continued	c. A small group of students will present a skit representing an obvious "gimmick," followed by a class discussion of the skit.	c. Recalling Inferring Causes Inferring Effects Questioning Making Choices	c. Social Studies Language Arts	c.	c.
	d. Small groups write their own commercials using their knowledge of "gimmicks" and come-ons."	d. Recalling Inferring Causes Inferring Effects Making Choices	d. Social Studies Language Arts		d.
	Correlating Careers: Actors, advertising agents, camermen, artists, copy-writers, layout men, media directors.				
	Career Clusters: 3, 7, 12				
34. Each student will identify a case which he can take to a small claims court.	a. A small group of students will visit a small claims court and	a. Observing	a. Social Studies Language Arts	a.	
	b. report on their visit to the remaining students in the group.	b. Recalling			
	c. A lawyer will be invited to speak to the class concerning the definition of the term "small claims court" and the function and role of this court in our judicial system.	c. Questioning Inferring Causes Inferring Effects			c.
	d. A discussion by students of the advantages of a small claims court especially for persons of low or middle income.	d. Recalling Questioning Inferring Causes Inferring Effects			
	e. A group of students would prepare and present a skit to demonstrate the use of a small claims court.	e. Recalling Inferring Causes Inferring Effects Making Choices		e.	e.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
34. Continued	Correlating Careers: Lawyer, judge, legal secretary, court stenographer, bailiff, court clerk.				
	Career Clusters: 2, 14				
35. Given a list of consumer protection agencies, the student will be able to select one and describe the protection it provides.	a. Invite a speaker from a local consumer protection agency to explain the function and activities of his agency.	a. Observing Questioning	a. Social Studies		
	b. Conduct a round-table discussion of the protection needs of the consumer.	b. Recalling Inferring Causes Inferring Effects Questioning Making Choices			b.
	c. Bring in and share articles from magazines and newspapers concerning consumer grievances.	c. Similarities Differences Inferring Causes Inferring Effects Making Choices			
	d. Gather newspaper articles reporting consumer suits against manufacturers.	d. Recalling			
	Correlating Careers: Investigators, lawyers, data processors, secretaries, telephone operators.				
	Career Clusters: 2, 13				
36. The student will match the familiar industries which provide products we use frequently with the men who founded the large corporations manufacturing those items.	a. Show filmstrips depicting the lives of famous corporate founders including Henry Ford, Firestone, Rockefeller.	a. Observing Recalling	a. Social Studies Language Arts		
	b. Prepare a list of autobiographies and biographies from which a student may select one and write a short written report or present an oral one.	b. Recalling Questioning Making Choices			b.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
36. Continued	c. Write and present a skit on the life of a famous corporation founder.	c. Recalling Similarities Differences Making Choices		c.	
	d. Create a table display of products with the name of their manufacturing corporation indicated.	d. Recalling Similarities Differences Ordering Making Choices			d.
	e. Original drawings of famous corporate heads created especially for a bulletin board display.	e. Recalling Ordering Making Choices		e.	e.
	Correlating Careers: Corporation president, chairman of the board, mail clerk, salesman, inventor, chemist.				
	Career Cluster: 2				
37. Each student will match five large carporations with the product they make and/or control.	a. Collect labels from products and indicate the name of the company on the label.	a. Recalling Making Choices	a. Social Studies		
	b. Gather magazine pictures of products and mount them on oak tag. Write the manufacturing company on another card. Play your own match card game.	b. Recalling Ordering Making Choices		b.	
	c. Choose a program sponsored by General Foods, Burlington Mills, or General Motors Corp. and tell how many different products are advertised.	c. Recalling Similarities Differences Inferring Causes Inferring Effects Making Choices			c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
37. Continued	Correlating Careers: Historians, writers, advertising agents, buyers, distributors, public relations workers. Career Clusters: 7, 12				
38. Each student will name and describe three types of business ownership: private, partnership, and corporation.	a. Discuss the similarities and differences among the three types of business ownership.	a. Recalling Similarities Differences Making Choices	a. Social Studies Language Arts		
	b. Discuss examples of each type of business ownership.	b. Recalling Similarities Differences Inferring Causes Inferring Effects			
	c. Invite a local businessman from each of the three types to discuss the advantages of his particular type of business for the work that he does. Correlating Careers: Accountant, bookkeeper, secretary, personnel manager, marketing representative, distributions manager, warehouseman. Career Clusters: 2, 12	c. Recalling Similarities Differences Inferring Effects Inferring Causes Questioning Making Choices			
39. The students will list five businesses in his community and tell into which ownership classification each fits.	a. The student will visit several local business establishments and inquire as to type of ownership.	a. Observing Questioning Making Choices	a. Social Studies Business Language Arts		a.
	b. Create a survey of twenty local businesses and compute the trend in the community.	b. Observing Inferring Causes Inferring Effects Questioning Making Choices			

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
39. Continued	Correlating Careers: Business analyst, data processor, printer, pressman, copywriter, public relations worker.				
	Career Clusters: 2, 3, 12				
40. The student will verbally explain the growing role of public opinion with respect to big business.	a. Discuss the history of public opinion polls, questionaires.	a. Recalling Similarities Differences	a. Language Arts Social Studies Industrial Arts		
	b. Decide on one thing that you would change public opinion about and then explore and initiate the necessary means.	b. Recalling Inferring Effects Inferring Causes Making Choices			b.
	c. Write a questionnaire to be distributed in your school to determine public opinion on some issue.	c. Recalling Questioning Making Choices			c.
	d. Discuss the careers involved in compiling, printing, and analyzing data from a questionaire dealing with public opinion.	d. Recalling Similarities Differences Questioning Making Choices			d.
	Correlating Careers: Public relations worker, market researchers, polsters, commercial artists, publishers, data processors, computor designers, copywriters, editors, sociologists.				
	Career Clusters: 3, 7, 13				
42. The student will list and discuss the advantages of the mass media.	a. Discuss the term mass media.	a. Recalling	a. Language Arts Social Studies		
	b. Discuss the role the mass media plays in our daily lives. What effect does it have?	b. Recalling Inferring Causes Inferring Effects			b.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
42. Continued	c. Discuss the vast numbers of people employed by the mass media.	c. Recalling Similarities Differences Grouping			
	d. Consider the effect of the failure of all of the mass media to operate simultaneously.	d. Inferring Effects			
	e. Distinguish between the words "affect" and "effect."	e. Recalling			
	Correlating Careers: Announcers, reporters, editors, disc-jockeys, broadcast technicians, repairman, distributors, electrical engineer, design engineers.				
	Career Clusters: 2, 3, 10				
43. The student will explain the uses of the questionnaire.	a. Discuss the uses of questionaires in both big business and consumer studies and their effect.	a. Recalling Inferring Causes Inferring Effects	a. Language Arts Social Studies		a.
	b. Research some large public opinion survey companies.	b. Recalling			
	c. Discuss the elements of a good question and the effect that it can have on people.	c. Similarities Differences Inferring Causes Inferring Effects Inferring Feeling Questioning			c.
	d. Discuss ten kinds of information asked for on questionnaires in addition to opinion or preference.	d. Recalling Similarities Differences Inferring Causes Inferring Effects Questioning Making Choices			d.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
43. Continued	Correlating Careers: Copywriters, research directors, public relations workers, media directors, commercial artist, sociologists, home economists.				
	Career Clusters: 3, 7, 4, 13				
44. The student will define each of the techniques of propaganda. Ex: Transfer Bandwagon Glittering Generalities Grass Roots	a. Discuss each of the propaganda techniques.	a. Recalling Similarities Differences Ordering	a. Language Arts Social Studies		
	b. Bring in articles or examples of these techniques used on the public daily.	b. Recalling			
	c. Discuss advertising and public relations in terms of propaganda.	c. Recalling Similarities Differences Inferring Causes Inferring Effects			c.
	d. Show filmstrips on critical thinking (Eye Gate House, Inc.)	d. Observing Recalling			
	Correlating Careers: Advertisers, marketing researchers, commercial artists, consumer market analysts, public relations workers, copywriters, editors, politicians, campaign workers.				
	Career Clusters: 3, 7, 12, 13, 14				
45. Students will list one responsibility the consumer must fulfill before he receives full warranty protection from the manufacturer and state why he must do this.	a. Discuss the purpose of warranties in general.	a. Recalling	a. Language Arts		
	b. Fill out a sample warranty registration and questionnaire that class designs.	b. Recalling		b.	

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
45. Continued	c. Discuss reasons why a warranty needs to be mailed in before full warranty protection is received.	c. Recalling Similarities Differences			
	d. Design own warranties and questionnaires.	d. Recalling Questioning Making Choices			
	e. Students will construct and maintain a bulletin board of the warranties and questionnaires they designed.	e. Recalling Inferring Causes Inferring Effects Ordering Grouping Questioning Making Choices			
	Correlating Careers: Product manufacturers, shipping and receiving clerks, inventory control personnel, repairmen, consumer counselor.				
	Career Clusters: 2, 10, 12				
46. Students will define the broad categories of careers relating to big business: business, commerce and trade, industry traffic.	a. Discuss the various careers that relate to the four main categories which have for their end the supplying of commodities. Prepare a chart of these careers.	a. Recalling Similarities Differences Ordering	a. Language Arts		
	b. Look up the meanings of the four main category words in the dictionary.	b. Recalling			
	c. Research one career in depth and report findings to class.	c. Recalling Causes Effects Making Choices			c.
	d. Interview one person in one of the below careers about what the job involves. Ask him about the enjoyment he receives from his work.	d.			d.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIPS	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
46. Continued	e. Interview a self-employed person (craftsmen or tradesman) and compare how he feels about his job to the feelings of the person interviewed in d.	e. Similarities Differences Causes Effects Questioning Making Choices			e.
	f. Discuss difference between company-owned carrier fleets and common carriers and difference in overhead care. Correlating Careers: Office machine operators, business administration, clerks, salesmen, purchasing agents, finance personnel, accountants, electronic computor personnel, cashiers, transportation personnel (rail, truck, aviation, ocean, lake and waterway), research and development personnel, engineers, marketing personnel. Career Clusters: 2, 12	f.			
47. Students will list two careers that deal with advertising through the audiovisual media.	a. Discuss the purpose and effectiveness of advertising. Does it influence students directly?	a. Recalling Inferring Causes Inferring Effects	a. Language Arts		a.
	b. Discuss the various careers that deal with advertising through the audiovisual media.	b. Recalling Similarities Differences Inferring Causes Inferring Effects Making Choices			b.
	c. Create an advertisement of some product you are trying to sell to the class. Make it as persuasive as possible then discuss feelings the class had about your product.	c. Recalling Inferring Causes Inferring Effects Questioning Making Choices Inferring Feelings			c.

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
47. Continued	Correlating Careers: Photographers, sign painters, draftsmen, illustrators, film editor, advertising personnel. Career Clusters: 3, 7				
48. Given the attached advertisement, students will list three ways in which the public relations worker has made his company appealing (see Test Item 48).	a. Discuss the elements of layout and design and the wording of advertisements.	a. Recalling Similarities Differences Inferring Effects	a. Language Arts		
	b. Find examples of good advertisements and discuss why they are effective. Prepare a bulletin board of these advertisements.	b. Similarities Differences Grouping Inferring Causes Inferring Effects Making Choices			b.
	c. Design an effective advertisement.	c. Recalling Grouping Inferring Effects Inferring Feelings			
	d. Discuss other ways public relations workers make their companies or products appealing to the public.	d. Recalling			d.
	e. Discuss the types of personality characteristics that public relations workers need to display in order to positively affect others.	e. Similarities Differences Inferring Causes Inferring Effects Inferring Feelings Making Choices			e.
	Correlating Careers: Advertising personnel, public relations workers, copywriters, media directors, commercial artists, layout men. Career Clusters: 3, 7, 12				

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
49. Given the article "Newspapers can be twofaced," concerning the opinion of a presidential consumer advisor, students will state how a newspaper can be two-faced.	a. Find examples of advertising in newspapers and magazines which show the importance of critical reading. Discuss first impression.	a. Recalling Similarities Differences Inferring Effects Inferring Feelings Making Choices	a. Language Arts		a.
	b. Design an ad that is misleading.	b. Recalling Ordering			b.
	c. Have students discuss what makes each of the above ads misleading.	c. Recalling Inferring Causes Inferring Effects			c.
	d. Using the Reader's Guide, find other articles dealing with fraud in advertising.	d. Observing Recalling			
	e. After reading the article "The Consumer Should Elect to Be Choosy," students will discuss and summarize main ideas.	e. Recalling Inferring Causes Inferring Effects Inferring Feelings Making Choices			e.
	f. Show filmstrip series on critical thinking and discuss.	f. Recalling Similarities Differences Inferring Causes Inferring Effects			
	Correlating Careers: Consumer advisers, newspaper reporters, advertising managers, newspaper publishers.				
	Career Clusters: 3, 12				
50. Students will name three ways the Federal Trade Commission polices the marketplace.	a. Discuss FTC means of enforcement of consumer rights. Examples -- 1. companies have money-back guarantees. 2. companies must fill orders promptly.	a. Recalling Inferring Causes Inferring Effects	a. Language Arts		

OBJECTIVES	SUGGESTED IMPLEMENTATION ACTIVITIES	THINKING SKILL PROCESS	CURRICULUM RELATIONSHIP	PSYCHO-MOTOR RELATION-SHIP	AFFECTIVE RELATION-SHIP
50. Continued	a. Continued 3) companies must stop dangerous practices, prevented from selling flammable carpets, must stop sale of flammable children's sleepware. 4) allow cooling-off periods. 5) companies must tell the truth, submit proof of claims.				
	b. Students write to FTC Regional Office if they have a complaint about a company. A list of addresses is attached.	b. Recalling Inferring Causes Inferring Effects			
	c. Discuss purpose of FTC.	c. Recalling			
	d. Discuss types of valid complaints that could be made to FTC. Discuss how wording of letter of complaint can affect receiver so that it receives immediate attention.	d. Recalling Inferring Causes Inferring Effects Inferring Feelings Making Choices			d.
	Correlating Careers: Consumer counselors, Federal Trade Commission personnel. Career Clusters: 13, 14				

Filmstrips

How to Write Series

D-67 Digging for facts
D-68 Building reports
D-69 Finishing reports

Adventures in Communicating

D-84 What we communicate
D-85 What is a sentence
D-86 Sentence variety
D-87 Sentence do's and don'ts

Writing and Revising

D-96 Title and Opening sentence
D-97 Body of Composition
D-98 Body of closing sentence
D-99 Revising and final editing

Organizing Your Writing

D-106 The 5 steps in writing a composition
D-107 Outlining a written composition
D-108 The main parts of a written composition
D-109 The introduction of a written composition
D-110 The body of a written composition
D-111 The conclusion of a written composition
D-112 The patterns of paragraphs
D-113 Making transitions in a written composition

Construction Reports

D-114 Digging for facts
D-115 Selecting the theme
D-116 Building reports
D-117 Painting with words
D-118 Finishing reports
D-119 Using reports

Filmstrips - The Youthful Consumer - a sound filmstrip on current affairs - available from the New York Times Educational Division (with worksheet master and discussion manual).

Related N. Y. Times Filmstrips -
Properity With End? Nov. 1969
Protecting the Consumer, March 1969
Squandered Resources, March 1970
The Generation Under 25, April 1968
Profile of Americans, November 1971
Your Tax Dollar, April 1971
The Seventies: Decade for Decision, October 1970
The Alienated American, December 1969
The History of Dissent, October 1968

Films

Brushing Up On Division
Graphs: Understanding and Using Them
Measurement in the Food Store
Percent - How and Why
Economic Education: Part of the Main
The Investor and Market Place
The Littlest Giant
Merchant to the Millions
Competition in Business
Fred Meets a Bank

(Business and Industry)

Andrew Carnegie, 19 min., B&W
The Basic Elements of Production, 13 min., B&W
Breaking the Trade Barrier, 54 min., B&W
Henry Ford, 26 min., B&W
It Takes Everybody to Build This Land, 21 min., color
Wendy's First Christman Card, 11 min., color

(Economics)

Inflation, 20 min., B&W
Money and Its Uses, 11 min., color

(Guidance - Vocational)

Choosing Your Occupation, 11 min., B&W
Planning Your Career, 16 min., B&W

Possible Careers for Oral or Written Research

1. Buyer for department store
2. Sales clerk
3. Department manager
4. Grocer
5. Stock boy
6. Cashier
7. Car dealers
8. Loan consultant
9. Bank loan manager
10. Credit union loan consultant
11. Computer operator
12. Billing clerk
13. Finance manager
14. Credit department employees
15. Stock broker
16. Stock exchange worker
17. Tax consultant
18. Accountant
19. Statistician
20. Bookkeeper
21. Clerical personnel
22. Real estate broker
23. Bank or savings and loan executive
24. Administrator on Consumer Protection Agency
25. Grocery store owner or manager
26. Finance counselor
27. Controller
28. A corporate lawyer or tax lawyer
29. Accountant on Price and Wage Control Board
30. Clothing designer
31. Garment worker
32. Fabric maker
33. Lab tester
34. Government inspectors
35. Fire prevention experts
36. Insurance Agents
37. Plastic Surgeon
38. Design engineer
39. Cost analyst
40. Systems analyst
41. Marketing experts
42. Market researchers
43. Production analyst
44. Air conditioning and refrigeration mechanic
45. Oil and gas burner mechanics
46. Small electric appliance serviceman
47. Gas appliance repairman
48. Plumber
49. Electrician
50. Dishwasher serviceman
51. Washer and dryer serviceman
52. Butcher
53. Baker
54. Meat packer
55. Portion control expert
56. Nutritionist
57. Meat inspector
58. Dairy product producer
59. Bulk milk dealer
60. Feeder lot operator
61. Livestock producer
62. Printer
63. Logo designer
64. Physician
65. Nurse
66. Emergency squadman
67. Trial lawyer
68. Judge
69. Process server
70. Clerk
71. Bailiff
72. Court reporter
73. First-aid instructors
74. Drug sales (wholesale and retail)
75. Drug manufacturer's chemist
76. Child development expert
77. Toy manufacturer
78. Retail toy sales
79. Child guidance experts
80. Consumer tester
81. Factory inspector
82. Research tester
83. Dietician
84. Chemist
85. Safety tester
86. Product designer
87. Stock market analyst
88. Stock traders
89. Economist
90. Comparison pricer
91. Shopper
92. Secretary
93. Telephone operator
94. Policeman
95. Building inspector
96. Treasurer
97. Comptroller
98. Builder
99. Construction workers
100. Actors
101. Advertising agents
102. Cameramen
103. Artist
104. Copywriters
105. Layout men
106. Media directors
107. Data processors
108. Corporate president
109. Chairman of the board

Possible Careers for Oral or Written Research (Continued)

110. Mail clerk
111. Inventor
112. Historians
113. Writers
114. Public relations workers
115. Personnel manager
116. Distribution manager
117. Warehousemen
118. Business analyst
119. Printer
120. Pressmen
121. Pollsters
122. Publishers
123. Editors
124. Computer designers
125. Sociologists
126. Research directors
127. Photoengravers
128. Truck drivers
129. Announcers
130. Reporters
131. Disc-Jockeys
132. Politicians
133. Compaign workers
134. Shipping and receiving clerks
135. Inventory control personnel
136. Aviation personnel
137. Railroad personnel
138. Highway personnel
139. Ocean, lake, and waterway personnel
140. Photographers
141. Sign painters
142. Draftsmen, illustrators
143. Electrotypers
144. Stereotypers
145. Lithographic occupations
146. Linotype operator
147. Federal Trade Commission personnel

Government Publications

Write to: Consumer Product Information
Washington D.C. 20407

List Catalogue numbers in numerical order.

(Note: There is a limit of two copies of any single free publication.
There is also a limit of five different publications.)

CATALOGUE NO.	TITLE
2200-0067	Cost of Operating an Automobile
0100-1826	Budgeting for the Family
7700-107	Johnny Horizon Children's Kit (ecological awareness)
7700-111	Toys Banned by the Food and Drug Administration
7700-108	Clothing and Fabric Care Labeling
7700-071	Look for that Label (mandatory label requirements for fiber content)
7700-059	Don't be Gypped (bait and switch advertising)
7700-021	How the Consumer Can Report to the Food and Drug Administration
7700-101	Packaging Materials (solid waste problems)
7700-094	Federal Food Standards

Teachers Resource Books

Write to: Sears Roebuck & Co.
Consumer Information Services
Dept. 703 - Public Relations
303 E. Ohio Street
Chicago, Illinois 60611

TOLEDO

Math

Home Construction

This is an example of math and industrial arts joining forces to relate to math to selected construction tradesman.

Mathematics - Home Construction

Constructing a Home

I. Purpose

The construction of a home involves many persons--the carpenters, plumbers, electricians, painters, landscapers, interior decoration, and architects. In one way or another each of these occupations uses mathematics.

II. Objectives

1. To show that the craftsman is a skilled tradesman, trained for his job.
2. To acquaint students with the amount of training needed for the various careers involved in building a home.
3. To show the advancement opportunities for those who are the best in their fields.
4. To allow students to work some problems similar to those faced by persons in these careers.

III. Activities

1. Discuss the occupations involved in constructing a house.

   a. The carpenter is no longer a man with little more to do than to hammer nails; he must serve an apprenticeship to learn his trade. Discuss the following areas with students.

      (1) reading blueprints
      (2) measuring materials
      (3) laying out foundations
      (4) making sure corners are "square" using a 3-4-5 triangle diagonal.

   b. The brickmason constructs walls, fireplaces, and chimneys, with bricks and cement blocks. Years of training are required to learn to be uniform in all details of work. He needs mathematics to determine:

      (1) numbers of bricks needed
      (2) amounts of materials, such as cement
      (3) height of structures (using geometry) when doing repair work.

   c. The plumber installs water, gas, and heating lines in the home. Following his high school graduation he serves a five-year apprenticeship which includes both on-the-job and classroom training. He must be able to determine:

      (1) amounts of materials (pipes, heating ducts, etc.) needed
      (2) where to place heating ducts and pipes according to blueprint specifications

d. The painter does much of the finish work on a home after it has been completed. He must be able to determine:

(1) heights of ladders needed for each job
(2) square feet of area to be painted
(3) cost of the paint needed to cover the home

e. The electrician installs the electrical wiring in home and often connects lighting fixtures. His training is much like that of the plumber. He must be able to determine:

(1) where outlets are to be placed according to the blueprints
(2) amounts of wire needed

f. The landscape architect places the finishing touches on the outside of the home. He must have training in both landscaping and architecture to be able to determine:

(1) areas needed for grass seeding
(2) size of plants and trees in relation to the home
(3) cubic feet of stone
(4) scale of blueprints

g. The interior decorator puts the finishing touches on the inside of the home. He or she must be able to determine:

(1) wall areas for wall paper and other special wall treatments
(2) amounts of material needed for draperies
(3) amounts of material for carpeting
(4) blueprint specifications

2. Allow each student to work problems similar to those that might be found in the above occupations. Answers to problems follow:

Estimating Measurements

Name________________________________

Date________________________________

a. 4 squares to cover the mirror
b. the board is 4 segments long
c. 12
d. (1) wire
(2) block
(3) square
(4) block
(5) square
(6) wire
(7) square
(8) block
(9) square

e. (1) inch
(2) inch
(3) mile
(4) inch
(5) foot or yard
(6) mile
(7) inch or foot
(8) inch or foot
(9) square in. or sq. ft.
(10) inch
(11) inch or foot
(12) inch

The Carpenter

a. 225 sq. ft.
b. 96 sq. ft.
c. 280 sq. ft.
d. 22 feet long, 12 feet wide
e. 5 feet, 10 feet
f. 16 feet, 14 feet, 21 feet, 28 feet
g. should be 1-7/8" by 1-5/8"
h.
i. 6-1/4 inches
j. 4-3/8 inches
k. 5-1/2" x 4-3/4"
l. (1) 20 and 10 in.
(2) 18 and 12 in.
(3) 18 and 12 in.
(4) 22-1/2 and 7-1/2 in.
m. (1) exactly
(2) under
(3) over
(4) over
(5) over
(6) under
(7) exactly
(8) under
(9) over
(10) exactly
(11) exactly
(12) over
n. 38-1/2 feet
o. $9.75
p. Yes

The Cement Mason and the Bricklayer

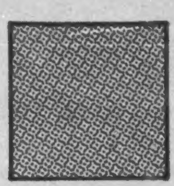
a. (1) 32 feet
    (2) 6 yds. (18 ft.)
    (3) 228 in. (19 ft.)
b. $504.00
c. 4 cu. yds.
d. 170.7 cu. yds.
e. 8,663 sq. ft.
f. (1) 368 sq. ft.
    (2) $165.60

The Painter

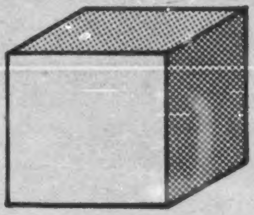
a. $40.80
b. $181.50
c. $63.75
d. $43.54
e. $72.20
f. (1) 1064 sq. ft.
    (2) 8.3 gallons
    (3) $53.52

It is sometimes necessary to estimate the length or area of an object. Many items can be used to do this. A piece of wire, a cardboard square, and a block can be used in finding length, area, and volume respectively. Segments and squares are used almost exclusively to find length and area; however, cubers are not exclusive units for volume. Cups, ounces, or pints could also be used.

Wire Segment



Cardboard Square



Block

(These items can be used to measure other objects.)

1. An interior decorator wanted to measure a bedroom mirror for a customer. She didn't have a ruler, so she used a cardboard square. What could she tell about the size of the mirror?

2. A carpenter wanted to measure the length of a piece of wood. He didn't have his measuring tape with him, so he used a piece of wire. What could he say about the length of the board?

3. A student purchased a new aquarium. He used a block to tell his brother how much space was in the aquarium. How many blocks do you think it would take to fill the aquarium?

4. Which object (a wire, a cardboard square, or a block) would be best to use if you wanted to tell:

    a. How tall the lamp is?

    b. How much sand a box holds?

    c. How much paper we need to cover the bulletin board?

    d. How much space is inside a boxcar?

    e. How large the garden is?

    f. How far it is from home plate to first base?

    g. How much glass there is in the window?

h. How much a drawer will hold?

i. How large the desk top is?

5. Which unit (inch, foot, yard, or mile) would you choose to measure each of the following:

   a. Your finger?

   b. A pencil?

   c. The distance from New York to California?

   d. A spoon?

   e. The width of your room?

   f. The distance to the moon?

   g. Your height?

   h. Height of a door?

   i. Area of a door panel?

   j. Distance of door handle from floor?

   k. Width of a classroom?

   l. Length of a baseball bat?

The Carpenter

Name ______________________________

Date ______________________________

1. A living room is 22'8'' long and 14'0'' wide. How many feet of picture molding are needed to go around the room just below the ceiling?

2. Find the total number of square feet in the gables at both ends of a house that is 28 feet wide, with a ridge 10 feet above the eaves.

3. Using a ruler divided into sixteenths, find the length and width (outside measurements) of the garage shown at the right.

4. A set of house plans is drawn to the scale of 1/4 in. to 1 ft., what actual lengths are represented by a line 1-1/4 inches long on the plans? By a length 2-1/2 inches long on the plan?

5. When the scale of a scale drawing is 1/8 in. = 1 ft., what actual lengths are represented by the following lengths on the drawing:

   a. 2 in. c. 2-5/8 in.

   b. 1-3/4 in. d. 3-1/2 in.

6. A room is 15 feet by 13 feet. Make a scale drawing of the room in the space provided at the right. Use the scale 1/8 in. = 1 ft.

7. At a scale of 1/4 in. = 1 ft., how long should you draw a line to represent a wall 25 feet long?

8. If the scale is 1/8 in. = 1 ft., how long a line should you draw to represent a distance of 35 feet?

9. A garage is 22' X 19'. Give the dimensions of a scale drawing of the garage if a scale of 1/4 in. = 1 ft. is used?

10. A board 20 inches long was cut into two pieces. Find the length of each piece given that:

    a. 1/2 of the longer piece is equal in length to the shorter piece.

    b. 2/3 of the longer piece is equal in length to the shorter one.

    c. 1/2 of the longer piece is 3/4 of the shorter piece.

    d. 1/2 of the longer piece is 3/2 of the shorter one.

11. Jack has a part-time job as a carpenter's helper. One of his duties is to keep the work area clear of all but the needed materials. He sorts pieces of lumber according to length. Boards over 1 yard in length are placed in one pile; boards exactly 1 yard in length are placed in a second pile; and boards under 1 yard in length are placed in a third pile.

    Check the column that indicates in which pile Jack would place each piece of lumber.

Length of Board	Over 1 Yd.	Exactly 1 Yd.	Under 1 Yd.
a. 3 feet			
b. 2 feet 6 inches			
c. 2 feet 14 inches			
d. 5 feet			
e. 6 feet			
f. 24 inches			
g. 36 inches			
h. 30 inches			
i. 38 inches			
j. 2 feet 12 inches			
k. 1 foot 24 inches			
l. 40 inches			

12. If Mr. Smith could buy the trim for 25 cents per foot, what would be the cost of trim for the living room? (Trim is sold only by the foot.)

13. Mr. Garcia is building a garage that will have rafters 8 feet 8 inches long. Can he cut 2 such rafters from lumber that is 20 feet long?

The Cement Mason and The Bricklayer

Name ______________________

Date ______________________

1. Mr. Washington makes concrete sidewalks. He starts with a form like a box but without a top and a bottom. Then he fills the form with cement, removing it when the cement has hardened.

    a. How many feet of lumber are needed to build a form 4 feet wide and 12 feet long?

    b. How many feet of lumber are needed to build a form exactly 1 yard by 2 yards?

    c. How many feet of lumber are needed to build a form that is 42 inches by 72 inches?

2. At $4.50 a square yard, what will be the cost of laying a cement floor in a garage that is 48 feet long and 21 feet wide?

3. A driveway 48 feet long and 9 feet wide is to be covered with a 3-inch layer of crushed stone. How many cubic yards of crushed stone will be needed?

4. A cellar 32 feet long and 24 feet wide is to be excavated 6 feet deep. How many cubic yards of earth must be removed, computed to the nearest tenth of cubic yard?

   Hint: To find the area of the walk, first find the area of the outer circle, which includes the walk and the flower bed. From that area, subtract the area of the circle representing the flower bed only.

Name ______________________

The Painter

Date ______________________

1. Find the cost, at 85 cents a square yard, of painting the two gables of a house 36 feet wide, the height of the ridge above the eaves being 12 feet.

   Hint: A gable is the vertical triangular portion of the end of a building, from the eaves to the ridge of the roof.

2. At 55 cents per square yard, find the cost of painting the two sides of two ends of a barn 30 feet wide, 40 feet long, and 18 feet high to the eaves, the height of the ridge above the eaves being 15 feet.

3. It has been decided to paint the two sides and two ends of a barn that is 26 feet wide, 36 feet long, and 20 feet high to the eaves, the height of the ridge above the eaves being 13 feet. It is estimated that for the first coat one gallon of paint will cover 300 square feet of surface and that for the second coat one gallon will cover 450 square feet. Deducting 118 square feet for openings, find how much the paint for two coats will cost at $4.25 per gallon.

4. At $4.75 a gallon, what will be the cost of painting the four exterior walls of a warehouse 42 feet long, 30 feet wide, and 16-1/2 feet high if the first coat is estimated to require one gallon to 48 square yards and the second coat one gallon to 72 square yards?

5. A room is 18 feet long, 15 feet wide, and 8 feet high. At 95 cents a square yard, what will be the cost of painting the four walls and ceiling, deducting 120 square feet for openings (doors and windows)? Count a fraction of a square yard as one square yard.

6. A carpenter has been asked to paint a room in a house. The room is 14 feet long, 10 feet wide, and 8 feet high. There are two doors in the room which measure 3 feet by 6-1/2 feet; two windows that measure 2 feet by 3 feet; and one window that measures 3 feet by 5 feet.

   a. How many square feet of wall surface will need to be painted?

   b. It has been estimated that the first coat of paint will cover 200 square feet per gallon; the second coat will cover 350 square feet per gallon. How many gallons will be needed for the two coats of paint? (Figure to the nearest tenth of a gallon.)

   c. At $5.95 per gallon, how much will it cost to paint the room? (You must buy a full gallon of paint.)

TOLEDO

Math

Small Business Manager

This unit could be correlated with any seventh-grade math text. It could be extended or taught as a mini-unit lasting two or three days.

Mathematics

Small Business Manager

(2-3 Days)

I. Purpose

Most businesses, small and large, use some method of determining whether an employee has reported to work each day and the number of hours he has spent working. The most common way of obtaining this information is to have the employee punch a time clock each morning as he enters the building and repeat the process each evening as he leaves. The worker's weekly salary is determined on the basis of the number of hours recorded on these "time" cards. In a small business, it is usually the manager who is responsible for checking these time cards and figuring the salary of his employees.

II. Objectives

1. To acquaint students with one of the duties of a small business manager that involves the use of mathematics.

2. To allow students the opportunity to work some problems that are examples of the type of mathematics that might be used in figuring employees' salaries.

III. Activities

1. Discuss with students the importance of accuracy in figuring the salaries of employees.

2. Allow students to work problems related to figuring hours worked and employee salaries.

Answers to problems:

Computing Employees' Gross Pay

1. M-8.0 T - 8.2 W - 8.1 T - 8.3 F - 8.3
40.9 hours
$210.635 or $210.64

2. M - 8.0 T - 7.9 W - 8.3 T - 8.5 F - 8.4
41.4 hours
$143.85

3. M - 8.1 T - 8.3 W - 8.3 T - 8.2 F - 8.6 S - 8.3 S - 8.3

41.5 hours during this week
16.6 hours on the weekend
$ 4.50 overtime rate
$199.20 total wages

4. M - 7.9 T - 8.1 W - 8.0 T - 7.7 F - 8.3

40.0 hours
$190.00

5.

Employee	Reg. Hours	Earnings
1	40	$ 50.00
2	37	56.61
3	37	61.79
4	35.5	51.83
5	39.5	62.41
6	30.2	59.19
7	37.8	81.65
8	34.2	97.13

6.

Employee	Reg. Hours	Amount	Over Hrs.	Over Rate	Amount	Total
1	40	$56.00	8	$ 2.10	$16.80	$72.80
2	40	74.40	3	2.79	8.37	82.77
3	40	65.60	8	2.46	19.68	85.28
4	40	53.60	3	2.01	6.03	59.63
5	36.3	84.22	0	3.48	0.00	84.22
6	40	78.40	9.2	2.94	27.05	105.45
7	40	101.60	6	3.81	22.86	124.46
8	40	112.80	6	4.23	25.38	138.18
		626.62			126.17	752.79

Computing Social Security Deductions for Employees

1.

Number	Tax	Number	Tax
1	$ 1.04	7	$ 2.20
2	$ 1.07	8	$ 2.35
3	$ 1.28	9	$ 2.84
4	$ 1.36	10	$ 3.05
5	$ 1.95	11	$ 3.30
6	$ 2.11	12	$ 5.31

2. 1 - 43d week
2 - 51st week
3 - 36th week
4 - 29th week
5 - 26th week
6 - 25th week
7 - 21st week
8 - 47th week
9 - 42d week
10 - 36th week
11 - 28th week
12 - 21st week

Computing Employees' Gross Wages - Straight Piecework Wage System

1.

Employee	Total Articles	Gross Salary
1	98	$ 65.66
2	108	$ 78.30
3	98	$ 63.70
4	111	$ 74.93
5	115	$ 89.13
6	106	$ 82.63
7	126	$ 98.91
8	94	$ 71.44

Computing Employees' Gross Pay

Name______________________________

Date______________________________

You are the manager of a small business and one of your duties is to compute the amount of money each of your employees has earned based on the number of hours he has worked each week. Each employee punches a time clock when he reports to work and when he leaves for the day.

On the time cards, times are recorded as decimals. For example, if an employee arrived at work at 6:30 A.M., his time card would read 6.5 as his arrival time. If he left at 3:00 P.M., his time card would read 15.0. The time clock is based on a 24-hour day, therefore 1:00 P.M. would be 13.0 on the employee's card.

Example: Raymond Baker worked the following hours during one week. His hourly rate was $1.68. What was his gross pay for the week? (Note: Gross pay means his pay before deductions for social security and income taxes are made.)

	Mon.	Tues.	Wed.	Thurs.	Fri.
In	7.0	7.0	7.5	7.5	7.0
Out	15.0	15.0	14.5	15.0	15.0

Solution: For each day, figure the number of hours that Raymond worked by subtracting the time he signed in from the time he signed out; then add these hours for the total time for the week.

Mon. 15.0 - 7.0 = 8.0
Tues. 15.0 - 7.0 = 8.0
Wed. 14.5 - 7.5 = 7.0
Thurs. 15.0 - 7.5 = 7.5
Fri. 15.0 - 7.0 = 8.0
38.5 TOTAL

His salary would be computed by multiplying his total hours by his hourly wage:

38.5 X $1.68 = $64.68

Note: In accordance with Federal law, employees must be paid "time and a half" for all hours that they work beyond 40 hours each week. Other firms that are not covered by this law usually abide by this regulation. The phrase "time and a half" means that the hourly overtime salary will be 1-1/2 times the regular hourly salary. Thus, if the regular salary is $1.28, the overtime rate will be 1-1/2 X $1.28 = $1.92. This would be paid for each hour over 40 that an employee works.

1. The following is a time chart for John Smith.

	Mon.	Tues.	Wed.	Thurs.	Fri.
Time In	7.5	7.4	7.6	7.3	7.5
Time Out	15.5	15.6	15.7	15.6	15.8
Daily Total					

How many hours did Mr. Smith work during the week?____________________

If his hourly wage is $5.15, what are his gross earnings for the week?______________

2. The following is the time chart for Henry Jones.

	Mon.	Tues.	Wed.	Thurs.	Fri.
Time In	8.0	7.9	8.1	7.8	7.7
Time Out	16.0	15.8	16.4	16.3	16.1
Daily Total					

How many hours did Mr. Jones work during the week? ______________________________

If his hourly wage is $3.50, what are his gross earnings for the week? _______________

3. The following is the time chart for Sally Smith. Sally's company is not covered by the law regarding overtime; however, she is paid 1-1/2 for time that she works on the weekends only.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
Time In	6.0	5.9	5.8	6.1	5.8	5.9	5.8
Time Out	14.1	14.2	14.1	14.3	14.4	14.2	14.1
Daily Total Hrs.							

How many hours did Sally work during the week?______________________________

How many hours did Sally work on the weekend?______________________________

If her hourly rate is $3.00, what is her rate on the weekend?______________________

What is her total salary for the entire week (include weekend)?___________________

4. If an employee punches out when he goes to lunch and then punches in when he returns, the manager must figure two times for each day and then add them together for the total time.

The following is a time sheet for George Banister.

Day	In	Out	In	Out	Total Hours
Mon.	7.9	12.0	13.2	17.0	
Tues.	7.8	11.9	13.1	17.1	
Wed.	8.0	12.1	13.3	17.2	
Thurs.	8.1	11.8	12.9	16.9	
Fri.	7.9	12.0	13.1	17.3	

How many hours did George work during the entire week?___________________________

If his hourly wage is $4.75, how much was h[illegible]ross pay for the week?________________

5. Complete the following payroll register. The number of hours worked by each employee for each day has already been figured from his time sheet. None of the employees worked overtime during this week.

Employee	M	T	W	T	F	Regular Hours	Regular Rate	Total Earnings
1	8	8	8	8	8		$ 1.25	
2	8	7	6	8	8		1.53	
3	7	7	8	9	6		1.67	
4	7	7	7.5	7	7		1.46	
5	7.5	8	8	8	8		1.58	
6	8	0	6.2	8	8		1.96	
7	8	6.5	8	7.3	8		2.16	
8	8	6.5	6.5	8	5.2		2.84	
							Total Gross Pay	

6. Complete the following partial payroll register. The number of hours worked each day by each employee has been transferred from his time sheet. Consider all hours worked each week beyond 40 as overtime and remember that each employee is paid "time and a half" for overtime.

Payroll Register
Laurel Mills
Payroll for the Week Ending May 27, 19____

Name	M	T	W	T	F	S	Reg. Hrs.	Reg. Rate	Amount	Over Hrs.	Over Rate	Amount	Total
1	8	8	8	8	8	8		$1.40					
2	8	8	7	8	8	4		1.86					
3	8	8	8	8	8	8		1.64					
4	8	7.5	8	8	8	3.5		1.34					
5	8	8	0	8	8	4.3		2.32					
6	8	8.7	9	8	7.5	8		1.96					
7	8	8	10	9	8	3		2.54					
8	10	8	8	8	8	4		2.82					
								Total			Total		

Computing Social Security Deductions for Employees

Name________________________________

Date_________________________________

Until 1960, an employer was required to withhold 2-1/4% of the earnings under $4,200 a year of each of his employees. This amount is added to an equal amount contributed by the employer, and the sum is then forwarded to the Federal Government to be used, eventually, for the benefit of these employees when they retire.

Illustration: A man earns $62 each week. How much will be deducted from his salary for Social Security tax?

Solution: Social Security Tax = 2-1/4% X $62
= .1225 X $62
= $1.40 (amount taken out)

Should an employee earn more than $4,200 in any one year, then, as soon as he has earned $4,200, his employer stops making deductions from his salary for the Social Security tax. Thus, if a man earns $200 a week, at the end of 21 weeks (4,200 ÷ 200) he will have earned $4,200. For the first 21 weeks of the year, 2-1/4% deductions are taken from his salary. For the remainder of the year, nothing is taken from his salary for Social Security.

Although only 2-1/4% is deducted for Social Security in 1960, the rate increased in other years. The following table shows the increased rates that have been scheduled by the Federal Government.

Year	Employee Rate
1955-1959	2 1/4%
1960-1964	2 3/4%
1965-1969	3 1/4%
1970-1974	3 3/4%
1975 and after	4 1/4%

1. You are a payroll clerk for a small company and one of your jobs is to figure the social security tax deductions for employees. What is the amount of social security tax on each of the following salaries in 1958? (Assume that the employee has not yet earned $4,200 during this year.)

1. $46.00
2. $47.50
3. $56.74
4. $60.29
5. $ 86.74
6. $ 93.95
7. $ 97.63
8. $104.50
9. $126.34
10. $135.57
11. $146.75
12. $236.18

2. During what week of the year will Social Security taxes cease to be deducted from each of the following salaries?

1. $100
2. $ 84
3. $120
4. $150
5. $168
6. $175
7. $210
8. $ 93
9. $104.50
10. $120.40
11. $158.74
12. $219.18

Name ______________________

Computing Employees' Gross Wages
Straight Piecework Wage System

Date ______________________

The straight piecework wage system is used infrequently today as a method of paying wages to employees. At one time it was believed that the use of this method of payment would act as an incentive to workers to produce more goods. Now, however, both management and labor agree that, to a large extent, it has failed to fulfill this purpose.

In the straight piecework system, an employee's salary depends on the number of articles he is able to complete each week.

Illustration: Jack Jones, a checker in a automobile factory, is able to check 162 car radios during a single week. If he receives 54 cents for each radio that he checks, what is his gross salary for the week?

Solution: Gross salary = number of units X salary per unit
= 162 X 54 cents
= $87.48

1. Find the gross salary for each of the following employees by completing this partial payroll register.

Payroll Register
Carlson Thread Company
Payroll for the Week Ending May 10, 19______

Employee	No. of Articles					Total Articles	Rate	Gross Salary
	M	T	W	T	F			
1	17	21	18	20	22		67¢	
2	24	23	20	22	19		72 1/2¢	
3	18	21	22	19	18		65¢	
4	19	22	24	25	21		67 1/2¢	
5	26	23	20	22	24		77 1/2¢	
6	24	21	19	22	20		78¢	
7	27	24	23	28	24		78 1/2¢	
8	20	18	16	19	21		76¢	

DAYTON

Music

This unit is innovative and introduces the student to the largest technology in the field of electronic music as well as the new careers available that have an expanding future.

Subject: Music
Topic: Electronic Music
Grade: 8
Time: 4 Weeks

Objective:

Children should be able to identify the new electronic sound of the twentieth century.

Student should be able to analyze the basic modern rhythms and the instruments involved.

Student should be able to experiment in making electronic sound on the tape recorder, synthesizer, electric guitar.

Rationale:

The electronic age has made the world of music attuned to "The New Technology."

Children use the radio, stereo, TV, tape recorders and electronic recordings. They should know something of how they work and experiment with sound. Synthesizer sounds should also be used on small kit.

Initial Experience:

1. Students experiment with stereo recording and monaural machine to see and hear contrast with one or more speakers. Try various turntable speeds.
2. Students experiment with tape recorder using various speeds running forward and backward.
3. Use electronic kit to understand volume control.
4. Electric guitar with speakers-demonstrate chords.
5. Electric piano-demonstrate and compare with regular piano.

Developmental Experience:

Build a small sound reproduction kit with book, rubber bands, paper tubing. This gives electronic sound. Use electronic kit to produce synthesizer-like sound. Change pitch and volume. Listen to the recording Music From Mathematics, played on IBM 7090 Digital Computer.

Sound Transducer
Switched on Bach
Naked Carmen

Experiment with tapes for sound.

Culminating Experience:

Trip to TV station. Disc Jockey recordings. Listen to electronic piano classes and electronic organs.

Make tape of sounds in room.

Make computer music from a graph.

Enriching Experience:

Make an electronic composition with electric guitar. Use various speeds, volume, synthesizer and tape recorder.

DAYTON

Science

Behavioral Patterns for a Successful Vocation

This unit includes measurable objectives and is an example of integrating consultants, field trips, class room activities, and audiovisual materials. The purpose is development of the self-image. Pupil evaluation is built in the unit and resources are listed.

Subject: Science
Topic: Behavioral Patterns for a Successful Vocation
Grade: 7 and 8
Time: 6 Weeks

Objective:

As a result of this activity, the pupil will:

1. Be able to list how knowledge, skills, motivation and behavior patterns will enhance his future employability, productivity, earnings and work satisfaction.
2. Be able to list the steps of problem solving and methods of carrying them out.
3. Be able to set up a tentative course of action for a given future vocation.
4. Develop a good self-image.

Rationale:

Students will develop a good self-image. They will be looking for a vocation that will make others and themselves happy as well as make a good living. Their talents will be expanded and put to good use.

Initial Experience:

1. Help set up bulletin board -- Pick the apple of your eye. Bring in a picture of parents and tell about their vocations. Discuss your future possibilities.
2. Play the "Market Game."
3. Pick a scientist -- read a book about his life -- list his or her goals or problem -- methods used to solve the problem.
4. Bring in news articles once each week.
5. Complete a self-inventory test, aptitude and interest test.

Developmental Experience:

Watch movies, filmstrips, tapes related to these subjects. Field trip to a mental hospital. Pick one or two vocations you find most interesting and list the type of personality that would be good for these vocations. Interview someone who is in the field and find out the requirements. Consult various college catalogues to determine the requirements, length of time, and cost for the course. Set up a financial plan on how the cost could be met, be specific.

Culminating Experience:

Have a panel representing various occupations. Interview and discuss various requirements.

Evaluation:

Written test.
Check news articles (work ads).
Teacher evaluates attitude of pupils in class.
Has a tentative decision been made?

Enriching Experiences:

A doctor as a guest speaker on mental health.
Field trip to the mental hospital.
Demonstration of New York Stock Exchange -- how it works -- how to become a stock holder.

Related Vocations

Doctor
Nurse
Psychiatrist
Psychology Teacher
Health Teacher

Resources:

Films

Story of Dr. Carver
Life of Charles Steinmetz
Louis Pasteur
Eli Whitney
Andrew Carnegie
Story of the Wright Brothers
Gateway To The Mind
Habit Patterns
Ways to Good Habits
Charles F. Kettering
Florence Nightingale

Filmstrips

Getting To Know Me
Adolescent "Know Thyself"
Mental Development
Emotional Development
Social Development
How To Adjust

Teaching Tapes

An Introduction To You
Your Personality and Your Health
The Truth About Yourself
What's On Your Mind
Let's Face It
Getting Along With Others
How Do I Look
Are You Worth It

PARMA

Science

This unit demonstrates a good balance among cognitive, affective, and psychomotor domains of learning. It contains an outstanding assortment of related materials.

Career Orientation Program - Science Department

Our philosophy has been to develop a flexible program to allow individual teachers the freedom to innovate as they incorporate this pilot program into our existing science curriculum. However, it has been necessary to establish a suggested course of study for Science 7 as a guideline for ordering materials.

The major portion of our work has been a compilation of resource materials that will be available for the use of both teachers and students.

A suggested Introductory Career Exploration Unit has been developed, but teachers are free to use their own imagination and ingenuity in incorporating this material into the framework of our existing course of study.

Seventh grade will be primarily concerned with careers in the life sciences, health, and medicine. Physical sciences will be included in the eighth-grade program. Since present eighth and ninth graders will not have been exposed to this program previously, some of the seventh-grade life science-health material may also be made available to them this year.

Periodically teacher evaluations of all career oriented activities will be made so that by the end of this year a revised syllabus can be made based on an evaluation of this year's experience.

Career Orientation Program - Science Department

Introduction-Career Exploration Unit

Title: Discussion of Interest and Aspirations.

Objectives:

1. To lead students to consider occupational choices on a more mature level.

2. To stimulate participation by students in compiling a list of factors which are important in career choices - i.e., hours, work conditions, advancement opportunities.

Method: Discussion in class on this question:

"If you could be anything you wanted right now - what would it be and why?"

Students rate factors in compiling a list of the factors in job selection. These are to be used later in lessons entitled "Interview" and "Criteria for Job Selection."

Students rate factors according to importance.

Example: 1. Job You Like
2. Salary
3. Educational Requirement

*Remember, the object of rating these is not to establish a factor we should consider #1 or #2, but to encourage students to think about what they should consider important in choosing a job or career.

Title: Criteria For Job Selection

Objectives:

1. To be sure students understand the scope and intent of each of the job selection factors. Students will have compiled a list of these factors in previous class discussion.

Method:

The list below includes many of the factors students will have mentioned in connection with why they have tentatively selected an occupation. Each of these should be explored so that students can intelligently read, listen to speakers, and do interviews.

Earnings
Where Employed
Training Qualifications
Opportunities for Advancement
Employment Outlook
Personal Qualifications
Geographic Locations
Permanence of Residence in One Location
Job Securities
Job Pressures
Job Challenge and Interest
Travel Required

Conclude by making up forms to be used in occupational interviews or library research on careers.

Title: Interview

Objective:

1. To have students talk to an adult about his occupation and gain insight into aspects other than salary and prestige.

Method:

Do an interview based on factors brought out in the "Job Criteria" session used previously.

Use the questionnaire format established by the class which might include the following areas:

Job Title
Nature of Work - Day's Activities
Advantages - Disadvantages
How Entered the Occupation
Training Necessary
Mobility and Employment Outlook
Salary
Working Conditions
Forum of presentation to be determined by individual teacher.

Title: Magazine or Current Events Assignment

Objectives:

1. To widen students' knowledge of variety of occupations involved in any large company or corporation.

2. To expose student to science-related occupations in industries seemingly unrelated to science.

Method:

Students bring in magazine advertisments or science news articles. What jobs or occupations are indicated?

What are the related occupations that might play a part in this ad or news story?

In the science areas listed below, what occupations might have been involved in some way with the advertisement or article:

a. Earth Science
b. Chemistry
c. Physical Science
d. Medical - Health Fields
e. Biology

For the jobs listed in each area above, you might take students further and identify which require college training, which require one to three years training and which require high school graduation.

Title: Career Project

Objectives

1. To motivate students to do reading about the type of work they are interested in.

Method: Three-part assignment

1. Interview a person in an area you've found interesting.

2. Research one career in each of the following areas:

   Earth Science
   Physical Science
   Agricultural Science
   Health Science

   Find information such as:

   Salary and working conditions
   Where employed
   Training required
   Opportunities for Advancement
   Employment Outlook

   Send for pamphlets and other free information.

3. Bulletin Board centered around one or a variety of related careers to be done by one or a group of students.

Time:

Will vary depending on whether teacher assigns one or all three assignments, whether material will be presented orally or written, and how much credit will be given.

Title: Overview of Paramedical Professional Careers

Objectives:

1. To expose students to the wide range of occupations utilized in the health-medical fields.
2. To inform students of the occupations available depending on length of training attained.

Method:

Film Horizons Unlimited (28 min.)

Booklet The Hospital People (80 pages)

Filmstrips with accompanying records

Overview of 23 paramedical professions

Seven jobs requiring one year of training after high school

Six jobs requiring 2-3 years of training after high school

Career in therapy - occupational, physical, speech, orthopedics

Title: General Inventory Science "Test"

Objectives:

1. To stimulate interest.
2. To point out to teacher and student where science interests and strengths might lie.

Method: Oral or written test questions

Examples:

1. Why is grass green?
2. Are you an animal?
3. If you were in a room with CO2 and NaCL what would you be able to do with each of them?
4. Are there any acids that won't hurt you?
5. What purpose does the blood serve?
6. What is the boiling point of water? The freezing point?
7. If a glass is completely filled with ice and water, will it overflow when the ice melts?
8. Why does the moon shine?
9. When a seed germinates, how does it know what direction is up?

Title: Occupation Crossword

Objectives:

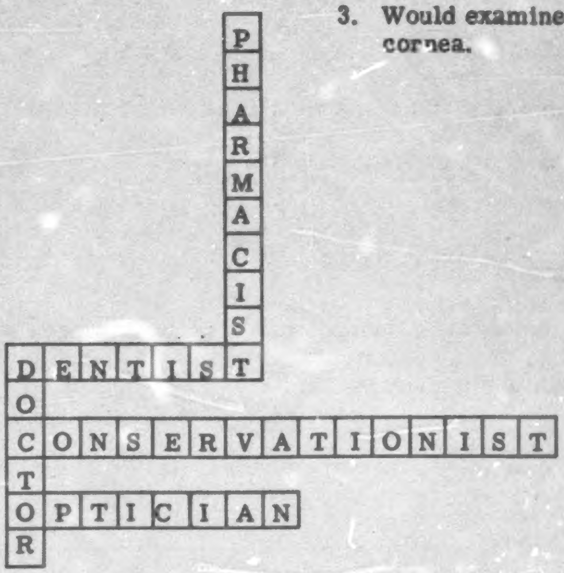
1. To stimulate interest in career-oriented activities.

Method:

Devise a crossword puzzle in which answers are related to a particular occupation. The crossword answers might focus on a particular area such as the health field, botany, zoology, or utilize vocabulary words in a particular chapter of the Work-a-Text.

Examples:

DOWN	ACROSS
1. Another name for physician.	1. Repairs incisors, molars.
2. Fills the doctor's prescription.	2. Preserves our natural resources.
	3. Would examine your lens, iris, retina, cornea.



Title: Job Interview (Role-Playing)

Objectives:

1. To give the student a more realistic idea about the factors involved in choosing a vocation and securing a position in that field. He will see the factors involved from both his and his employer's viewpoint.

Method:

Students act out a job interview. One portrays the personnel manager, the other portrays the job applicant. The job applicant is instructed to secure information on all aspects of the job, both positive and negative, while at the same time trying to sell himself for the job. The personnel manager is to secure as much information as possible about the applicant's ability and background so that he may choose between this applicant and several others applying for the same position.

Evaluation Sheet

Activity Description ______________________________

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General Evaluation ______________________________

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Recommendations for Revisions of the Activity ______________________________

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Scientific Occupations

Chemistry:

This group includes occupations concerned with research in the chemical and physical properties and compositional changes of substances. Specialization usually occurs in one or more branches of chemistry, such as organic chemistry, inorganic chemistry, physical chemistry, analytical chemistry, and biochemistry. Some of the more specific areas or fields in which a chemist might work are:

Adhesives
Coatings
Detergents
Glass
Paint
Petroleum
Textiles
Plastics
Polymere
Rubber
Wood
Dyes
Cereal
Pharmaceuticals
Confections
Dairy Products
Preserved Foods
Sugar
Alcohol
Leather

Physics:

This group includes occupations concerned with the investigation of the laws of matter and energy and their application to problems in such fields as science, engineering, medicine and industry. Some of the more specific areas or fields of work in physics might include:

Accoustics
Atomic Structure
Molecular Structure
Electricity
Magnetism
Electronics
Heat
Light
Mechanics
Nuclear
Plasma
Solid State
Theoretical

Geology:

This group includes occupations concerned with the investigation of the composition, structure, and physical and biological history of the earth's crust and the application of this knowledge in such fields as archaeology, mining and construction. Typical specializations include economic geology, historical geology, mineralogy, mining geology, palenontology, petroleum geology, petrology, physiography, structural geology and subsurface geology. Some more specific areas or fields in which a geologist might work are:

Engineering
Ground Water
Mining
Oil Prospecting
Mineral Prospecting
Soil
Mineralogy
Oceanography
Paleontology
Geomagnetics
Glaciologist
Stratigraphy
Geophysics
Geodesy
Petrology
Photogeology
Hydrology
Seismology
Volcanology
Petroleum
Geomorphology

Meteorology:

This group includes occupations concerned with the investigation of atmospheric phenomena. Typical specializations are synoptic meteorology, climatology, dynamic meteorologist, physical meteorology. Some specific jobs include:

Synoptic Meteorologist
Weather Forecaster
Climatologist
Hydrographer
Radiosonde Operator
Weather Observer
Meteorological Aid
Map Plotter

Physical Science:

This group includes occupations related to physical science which have not been classified in any other group.

- Geographer
- Control Chemist
- Laboratory Sampler
- Cement Tester
- Paint Technician
- Aerial Photograph Interpreter
- Quality Control Technical
- Photo-optics Technicians
- Gas Tester
- Soils Tester

Agricultural Science:

This group includes occupations concerned with research into problems related to agriculture, horticulture and forestry. Also includes development of improved methods in cultivation, handling processing, and storing of products, land conservation practices, peat control, landscape planning and related activities.

- Crop Scientist
- Soil Conservationist
- Wool Technologist
- Animal Husbandry
- Dairy Science
- Forester
- Forest Examiner
- Vegetable Grower
- Forest Ranger
- Forest Recreation
- Timber Manager
- Flower Grower
- Fruit Grower
- Forest Ecologist
- Soil Scientist
- Wood Technologist
- Seed Analyst
- Nurseryman

Biological Sciences:

This group includes occupations concerned with research in the reporduction, growth and development, structure, life process, behavior and classification of living organisms and the application of findings to the prevention of desease in the maintenance and promotion of health in plant and animal life. Also includes investigations into economic utilization or harmful aspects of specific animals and plants.

- Anatomist
- Biochemist of
  - Enzymes
  - Proteins
  - Steroids
- Aquatic Biologist
- Cytologist
- Botanist
- Ecologist
- Taxonomist
- Entomologist
- Geneticist
- Bacteriologist
- Immunologist
- Parasitologist
- Zoologist
- Mycologist
- Fish Culturalist

Psychology:

This group includes occupations concerned with collection interpretation and application of scientific data relating to human behavior and mental process.

- Child Psychologist
- Development Psychologist
- Educational Psychologist
- Engineering Psychologist
- Experimental Psychologist
- Social Psychologist
- Guidance Counselor
- Vocational Counselor
- Clinical Psychologist
- Industrial Psychologist
- School Psychologist
- Residence Counselor

Medicine and Health:

This division includes occupations concerned with the health care of humans or animals in the fields of medicine, surgery, and dentistry, and in related patient-care areas, such as nursing, therapy, dietetics, prosthetics, rehabilitation and pharmacy. Also included are occupations in sanitation, environmental and public health, and in laboratories and other health facilities. Many occupations in this group require licensing or registration to practice or use a specific title.

Physician
Surgeon
Anesthesiologist
Psychiatrist
Radiologist
Dentist
Veterinarian
Pharmacist
Nurse
Dietician
Medical Technician
Dental Technician
Speech Therapist
Hearing Therapist
Health Officer
Chiropractor
Optometrist
Physical Therapist

Science Occupations Films

Title	Subject area and description	Length	Source	Price
Stars in Their Eyes	Astronauts	15 min.	Dept. of Air Force 8900 S. Broadway St. Louis, Mo. 63125	NC
Preparing for Tomorrow's World				
Mission: Oceanography		28 min.	Dept. Of Navy Assistant of Pub. Info. 4th Naval District U.S. Naval Base Philadelphia, PA. 19112	NC
Career in Chemistry		14 min.	Farm Film Foundation 1425 H. Street NW Washington, D.C. 20005	NC
San Diego Zoo	Operation of a Zoo and related careers	26 min.	Copley Productions 4341 Douner Place Aurora, Ill. 60506	NC
Salmon--Catch to Can	Fish canning operations	14 min.	Fish and Wildlife Serv. Bureau of Commercial 1815 North Fort Myer Dr. Arlington, Virginia 22209	NC
Careers in Oceanography		28 min.	Commandant Fourth Naval District U.S. Naval Base Philadelphia, PA. 19112	NC
A Silver Diploma	Training center for mineral engineers	20 min.	Colorado School of Mines Dr. Anton Pegis Golden, Colorado 80401	NC
The Gentle Doctor	Veterinary medicine	21 min.	Assn. Films, Inc. 324 Delaware Ave. Oakmont, Pa.	NC
The Veterinarian		28 min.	Texaco Inc. Sales Promotion P.O. Box 538 Columbus, Ohio 43216	NC

Science Occupations Films (Continued)

Title	Subject area and description	Length	Source	Price
Tommy Looks at Careers in Chemistry		26 min.	BF Goodrich Co. Public Relations Dept. Akron, Ohio 44138	NC
A Time of Searching	Agricultural research	22 min.	Modern Talking Pictures 2218 Euclid Ave. Cleveland, Ohio 44115 Phone 621-9469	NC
The Endless Forest	Forest management--operation, restoration, wildlife	28 min.	Modern Talking Pictures	NC
Day of Judgement--Pharmacy Recruitment		24 min.	Eli Lilly and Co. A-V Film Library P.O. Box 618 Indianapolis, Ind. 46206	NC
Toward the Victory of Health	Dietary research	14 min.	Modern Talking Pictures	NC
Bright Future	Dental hygiene	27 min.	Bureau of A-V Service 211 E. Chicago Ave. Chicago, Ill. 60611	NC
Your Magic Step to Career Opportunity	Dental school	7 min.	American Dental Assoc. Bureau of A-V Service	NC
The Challenge of Dentistry		28 min.	American Dental Assoc.	NC
Molescular Magic	Probe of atoms and molecules	30 min.	Modern Talking Pictures	NC
Medical Technologist		14 min.	National Comm. for Careers in Medical Technology 1501 New Hampshire Ave. NW Washington, D.C. 20038	NC
Someone You Can Be--Someone You Can Trust	Career in Medicine	29 min.	Smith Kline and French Lab Film Center 1500 Spring Garden Street Philadelphia, Pa. 19101	NC
Counter Attack	Health Careers	29 min.	Modern Talking Pictures	NC
Horizons Unlimited	Health Careers	29 min.	Modern Talking Pictures	NC

Science Occupations Films (Continued)

Title	Subject area and description	Length	Source	Price
In a Medical Lab	Lab Team Workers	28 min.	Nat. Com. for Career in Medical Tech.	NC
Laboratory of the Body	Electrophoresis Chromotography research	28 min.	Modern Talking Pictures	
The Leak Thieves	Plant Research	27 min.	Smithsonian Institute A-V Service Office of Public Affairs Museum of History and Technology T.V. Studio Washington, D.C. 20560	NC
A Story With No End	Tour of medical research lab	29 min.	Modern Talking Pictures	NC
Miracle of Flowers	Flower Arranging	14 min.	Joe E. Sanders Film Library 808-43rd. Street West Bradenton, Florida	NC
Light in the Shadows: Story of X-Ray	Radiologist	21 min.	DuPont DeNemours & Co. Motion Pictures Section Advertising Department 1007 Market Street Willmington, Del. 19898	NC
Careers in Bacteriology		20 min.	Becton Dickson & Co. Attn. Mr. Allen Dyleski Advertising, Manager Rutherford, N.J. 07070	NC
Time for Living	World Health	28 min.	Modern Talking Pictures	NC
Jobs in Atomic Energy		13 min.	U.S. Atomic Energy Comm. Chicago, Oper. Office 9800 S. Cass Ave. Argonne, Ill. 60439	NC
Search	Lab research	22 min.	Gen. Motors Corp. Pub. Rel. Staff Film Library Gen. Motors Building Detroit, Michigan 48202	NC

Chronicle Occupational Briefs published by Chronicle Guidance Publications, Inc., Moravia, New York

01 - Engineering

- 002 Aeronautical
- 003 Electrical, Technicians, Radio and TV Technicians
- 006 Ceramic
- 008 Chemical
- 010 Mining and Petroleum
- 011 Metallurgists and Metallurgical
- 013 Agricultural
- 015 Nuclear

02 - Physical Science

- 021 Astronomers
- 022 Chemists, Chemistry Lab Technicians
- 023 Physicists
- 024 Geologist, Geophysicist, Oceanographer
- 025 Meteorologist, Technician
- 026 Lab tester
  - Lab technician
  - Geographer

04 - Life Science

- 040 Agricultural Scientists
  - Dairy Science
  - Agronomy
  - Soil Science and Conservation
  - Forester
  - Horticulturist
  - Animal Husbandry
- 041 Fisheries
  - Pharmacologist
  - Biologist and Microbiologist
  - Biochemist
  - Entomologist
  - Zoologist
  - Food Technologist
  - Fish and Wildlife Conservation
- 045 Psychologist
  - School Psychologist
  - Guidance Counselor
  - Rehabilitation Counselor

07 - Medical and Health Related Fields

- 070 Physicians and Surgeons
  - Psychiatrist
- 071 Osteopath
- 072 Dentist
- 073 Veterinarian
- 074 Pharmacist

075	Nurses
077	Dietician
078	Medical and Dental Technologist
	X-Ray Technician
	Medical Laboratory Assistants
	Medical Technician
	Dental Hygienist
	Radiologic Technician
079	Chiropractor
	Medical Assistant
	Practical Nurse
	Sanitarian
	Speech Pathologist and Audiologist
	Podiatrist
	Physical Therapist
	Health Physicist and Technician
	Orthopedics
	Occupational Therapist
	Dental Assistant
	Occupational Therapy Assistant
	Optometrist
	Dental Lab Technician
193	Radio Operators
194	Sound Technicians
196	Aviation - pilots, navigators, traffic controller
420	Farmer
712	Optician (Instrument Technician)
720	Radio and TV Technicians

TOLEDO

Science

Careers in Denistry, Meterology, and Pollution Control

These units are representative examples on how to introduce three science related career topics.

Science

Careers in Dentistry

I. Purpose

Reginald H. Sullens of the Council on Dental Education has stated, "As a division of health service dealing directly with the teeth and all oral tissues, and indirectly with the entire body, dentistry is today a profession of intellectual and scientific stature."

II. Objectives

1. To acquaint students with the careers in dentistry.
2. To become familiar with the education and special training necessary for a variety of careers in the dental field.
3. To gain insight into the advantages and disadvantages of a career in dentistry.

III. Activities

1. Have free and inexpensive materials dealing with dentistry available for the class to read.
   a. "Careers in Dentistry" is a 17-page booklet that deals with dental careers, dental aptitude, educational programs, financing an education, and some conclusions about dentistry.
   b. "Careers in Dental Hygiene" is a four-page brochure about dental hygiene.
2. Ask several students to talk with their dentists and the dentists' assistants about their jobs and report to the class.
3. Select several groups of students to act out scenes that might relate to dentistry (with costumes if possible).
   a. Dental assistant checking a person's teeth in the office.
   b. Dentist extracting a tooth from a frightened child.
   c. Dentist or his assistant visiting a classroom of first graders to talk about dental care and how to brush teeth.
   d. A dentist talking with a high school student about a career in dentistry.
4. Ask students to list the advantages and disadvantages of a career in dentistry. Compare list to other careers in the medical field.

Science

Meteorologist

I. Purpose

Most people are familiar with the weather forcast which is a direct result of the work of a meteorologist, but relatively few appreciate the effort that goes into it. The purpose of this unit is to familiarize students with the importance of the meteorologist's job, the qualifications and skills he must possess, and other pertinent information.

II. Objectives

1. To appreciate the importance of meteorology as it relates to our society.

2. To understand through an activity how meteorologists collect and interpret data in order to make weather maps and forecasts.

3. To impress on students the importance of neatness and accuracy in addition to the various types of skills related to this job, e.g., mathematics and communications.

4. To become familiar with the variety of meteorological tasks along with the benefits and disadvantages of working in this field.

III. Activities

1. A brief general discussion should be conducted with students emphasizing the importance of meteorology. Questions should be posed, such as:

   a. How would our lives be different if there were no meteorologists?

   b. How meteorology started as a science? (Most textbooks have unit on meteorology and will provide a number of examples of how human activity is affected by weather.)

2. Have each student (or a small group of students) collect and interpret weather data.

   a. Record weather information on map.

   b. Temperatures and pressures should be written on the map beside the proper station.

   c. Wind direction (the direction the wind is coming from) should be indicated on the map by the tail of the arrow. The number of barbs may indicate the speed of the wind; however, it is not essential in this activity.

   d. Locate the station with the lowest pressure and write a large "L" over it. This is the center of the low pressure area. A cold front starts at the center of the low pressure area. A cold front starts at the center of the low pressure and lies along the line which separates the stations where winds shift from southwest to northwest and where there is a decrease in temperatures.

   e. A warm front also starts at the low and lies where winds shift from east to southeast and temperatures rise. Indicate the point with the highest pressure with a large "H."

f. Problem: Assume that the high and low pressure systems move eastward at a rate of 600 miles per day. The cold front and warm front keep the same general shapes. Have each student predict weather conditions for a period of 24 hours at various weather stations.

3. Using the weather maps, students could also do the following activities.

   a. Draw the isobars or isotherms (one or the other, but not both) on the map.

   b. Using the relative humidity table, give the wet bulb readings at various stations and have students calculate the humidities.

   c. If weather instruments are available, have students demonstrate the uses of these instruments and make local forecasts based on observations.

4. Following the activities, hold general class discussion on what it would be like to be a meteorologist. The discussion should include salaries and educational requirements.

Science

Pollution Control

I. Purpose

Pollution control has become a public concern. At one time, people thought that the sea, land, and sky could never be so ruined that man could not survive. However, as our nation and others have advanced, these resources have become more and more polluted.

II. Objectives

1. To acquaint students with various forms of pollution.

2. To make students aware of some of the attempts to clean up our environment.

3. To acquaint students with some of the jobs available in the area of pollution control.

4. To allow students to participate in some activities which are similar to those performed by persons engaged in pollution control.

III. Activities

1. This lesson should be used in conjunction with "Section Seven - Man and Nature" (pages 132-157) in the text Interaction of Man and the Biosphere.

2. Hold several environmental hearings in the class as suggested in "Investigation 7.3," pages 155-157.

   a. Select several cases from the list provided. These cases should exist in the Toledo area.

   b. Select students to play the roles of judge, defense attorney, prosecuting attorney, witnesses for each side of the case, and the jury.

c. Each attorney should present his case, calling witnesses. (Each student should research his position prior to the presentation.)

d. Allow the jury to meet and discuss the case and present their decisions to the judge.

e. Select a different set of students for the various roles in the cases.

f. Sample list of topics follows.

3. Have students study the various types of pollution in the Toledo area as suggested in "Investigation 7.2" pages 143-146.

   a. Divide the class into small groups and assign a form of pollution to be studied to each group.

      (1) chemical pollution
      (2) heat pollution
      (3) noise pollution
      (4) solid-waste pollution (trash and garbage)

   b. Each group should prepare a list of things that contribute to that type of pollution (other pollution categories can be included).

   c. Try to determine where the pollution is coming from.

   d. Study local newspapers and determine what is being done in the local community to end pollution.

   e. The above information should be compiled and presented in chart form to the rest of the class.

   f. Compare group reports.

      (1) which form of pollution is most serious in Toledo?
      (2) which forms of pollution have been reduced?
      (3) which problems have been most neglected?
      (4) what can groups (such as students) do to help reduce pollution in Toledo?

4. Using the charts prepared by the class, figure the E.Q.R. (environmental quality rating) of Toledo.

   a. Start with 100 points. If the community has no pollution, the score is 100. If the pollution is mild, the E.Q.R. is between 90 and 99. If the pollution is moderate, the E.Q.R. is between 80 and 89. If the E.Q.R. is below 80, the community has a severe problem.

DAYTON

Social Studies

From Craftsman to Factory Worker

This unit demonstrates a relationship between history and modern-day employment practices and includes a good career concepts.

Subject: Social Studies
Topic: From Craftsman to Factory Worker
Grade: 7
Time: One Week

Objective:

Pupil will become aware:

1. Of the change that the Industrial Revolution brought upon the civilized world.
2. Of the jobs offered in factories today that formerly were done by hand by craftsmen.

Rationale:

Students should realize that prior to the Middle Ages and the advent of the Industrial Revolution human needs were fulfilled directly by the individual. He grew his own food, made his own shelter, and clothed himself. In this lesson the student can relate which jobs initially done by hand are now done by machines in factories.

Initial Experience:

1. Have students list all of the crafts common to the Middle Ages--bootery, blacksmith, silversmith, tailor, glover, fishmongers.
2. List next to these the jobs comparable to them today (jobs related to a shoe store, gas station, clothing store, supermarket).
3. Have the students make banners of the Medieval Guilds relating to each occupation.

Developmental Experience:

1. How did one get a job in the Middle Ages--Apprentice system:
   a. Be an apprentice (explain).
   b. Be a journeyman (explain).
   c. Become a master craftsman (explain).
2. How does one go about getting a job today?
   a. Fill out a job application form.
   b. Read carefully a prepared sheet [illegible] making resumes.
   c. Role-play on different things not to do at a job interview.
   d. List all of the personal and educational qualifications needed for each student's specific job interest.
3. Bring in as many antiques as possible to show students the various crude instruments of long ago.
4. Films.

Subject: Social Studies
Topic: Bulletin Board
Grade:
Time:

Objective:

For the students to create a bulletin board on any topic they choose by assigning jobs needed in the completion of the project.

Rationale:

To allow the student to use his creativity and imagination in making the board and his logic in dividing the workers into various jobs.

Initial Experience:

Tell the students they are to make a bulletin board. The subject may be the current topic of the class or any current events idea. Explain that the students are to divide the labor involved and begin to develop the job.

Developmental Experience:

The students decide, as a group, what the topic and outlay of their board will be. They will assign such jobs as:

1. Board Co-ordinator

2. Fashion Designer

3. Photographer

4. Artist

5. Construction Engineers and any other job they feel is necessary

Culminating Experience:

The students will put their work on a bulletin board.

Enriching Experiences:

Encourage the use of camera and drawings to communicate the message of the bulletin board.

DAYTON

Social Studies

Negro (Black) History

Negro (Black) History is a sample of using history to give students experiences in the affective domain.

Subject: Social Studies
Topic: Negro (Black) History
Grade: 6-7-8
Time: 6 Weeks

Objective:

Students of all backgrounds will become aware:

1. Of self; of a feeling of dignity and integrity;
2. Of the multi-faceted heritage of the Negro-American;
3. Of the multitudinous contributions of the Negro-American to America;
4. Of the precious quality of individual and social freedom.

Rationale:

The general feeling of "I'm a Negro and black and will never amount to much anyway" runs deep in the minds of Negro-American children. Most "careers" have been open to the Negro race for less than twenty years. Even education was a closed option until 1954. This unit will be used not merely to acquaint the Negro-American child of the many careers open to him now, by acquainting him with the struggles of successful Negroes, but to teach respect and responsibility, as well.

Initial Experience:

1. Introduce the concept of individual and social freedom (blind freedom/responsibility freedom), by defining each term on board, discussing it freely, writing a single page on: "I think freedom is. . . ."
2. Students read and discuss "The Declaration of Independence-1776."
3. Show film In Search of a Past, (53 min. color) from The Xerox Education Division Film Library. Discuss and summarize.

Developmental Experience:

1. List 50 common careers in America; students and teachers cooperate, write on board; students keep notebook on daily lesson.
2. List at least one Negro-American who has been successful in each of these careers, using:
   a. The remainder of Xerox series Of Black America, 16 mm.
   b. John F. Kennedy's "1963 Civil Rights speech," 33-1/3 rpm record.

c. "Adventures in Negro History, Vol. I & II," 33-1/3 rpm records.

d. "History of the Black Man" by T. M. Alexander, 33-1/3 rpm record.

e. Books: *Before the Mayflower* by Lerone Bennett, Jr.; *From Slavery to Freedom* by John Hope Franklin; *Striving to Overcome* by Margaret Peters; *Black Power Revolt* by Floyd B. Barbour; *The American Negro* (with wall chart and teacher's guide) by McRae & Blocker; *Blacks in America Then and Now* by Edgar A. Toppin; *The Negro in American Life* by Wade; *Negro Builders and Heroes* by Brawley; *World's Great Men of Color* by Rogers; *Africa's Gift to America* by Rogers; *The Negro in America* by Larry Cuban; *The Free and the Brave* by Henry F. Graff; *A Special Bravery* by Johanna Johnston; *The Black People of Africa* by Dennis; *The Child's Story of the Negro* by Jane D. Shackelford.

Culminating Experience:

1. Production and presentation of school play depicting the history of the Negro-American;
2. Panel of speakers, both Negro and Caucasian, from a cross-section of the community, outlining the careers presently available.

ORRVILLE

Social Studies

Orrville clearly illustrates how the popular textbook topics in eighth-grade social studies interlock with career concepts.

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    Unit II - Dissatisfaction and Rebellion Inspire a New Kind of Government
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    Unit VI - The Wide Open Spaces are Filled
    Unit VII - Americans Build for a Complex Future
    Unit IX - America Participates in the Problems of the World
    Unit X - America Flourishes in a Shrinking World

Geography

    Unit I - A View of the World
    Unit II - The Earth - A Good Place to Live
    Unit III - Man - Jack-of-All-Trades
    Unit IV - Society - Where the Action Is
    Unit V - Outlook for Tomorrow

Appendix

    Appendix A - Combined Laboratory Experiences and Supplementary Academic Materials Listings
        I. Field Trips
        II. Other Laboratory Experiences
        III. Supplementary Academic Materials

Testing and Guidance Program

U.S. History

Unit I - America Changes from Wilderness to Colonial Empire

*The units in this program represent the units of the textbook which could be used.

Related Behavioral Objectives

1. Be able to list and explain five pieces of colonial furniture. [illegible]
2. Be able to list three jobs involving interior design.
3. Explain simplicity of colonial interior design to modern design.
4. Be able to draw colonial rooms of furniture. (Show functional layout.)
5. Be able to state one function of interior design and understand the importance of interior design through historical perspective.

Procedure

1. Discuss the correlation between colonial life and the designs of their homes. Show how all items are functional.
2. Discuss how colonial design reflects English and French decor.
3. Talk about the contrasts between colonial and modern design and relate advancements in design.

Activities

1. Show slides depicting colonial furniture.
2. Reports dealing with interior designing.
3. Show slides depicting colonial and modern design.
4. Make drawings of colonial rooms to reflect the pioneer way of life (functional).
5. Design own room to suit personal tastes. Display along with posted information on interior design.

Resources

1. Basic text: One Nation Indivisible; Landis Heller and Norris Patter, Charles Merrill Books, Inc. 1966.
2. Slide Presentation
3. Source books
    a. Colonial Living by Edwin Tunis
    b. Great Historic Places by American Heritage
    c. Book of Interior Decoration by Ladies Home Journal

Unit II - Dissatisfaction and Rebellion

Inspire a New Kind of Government

Related Behavioral Objectives

1. Be able to understand the requirements and qualifications for the presidency by listing these.
2. Develop an attitude of respect for the presidency by naming reasons why this ideal should exist.
3. Understand the basic changes in the presidency from colonial days to the present through a list of comparisons.
4. Cite the reasons for the development of the cabinet.
5. Given a list of cabinet positions the student should identify six (and state their functions).

Procedure

1. Prepared worksheet for the readings and reports.
2. Discuss the biographical sketches and readings.
3. Establish a procedure for constructing the presidential cabinet poster.
4. Show film The American Presidency.

Activities

1. Write biographical sketches of several early presidents and their opponents.
2. Readings on the daily routines and tasks of the presidency.
3. Fill out answers to worksheet on presidential changes.
4. Construct a class poster picturing each cabinet member and his responsibility, with groups of students explaining each one. Also include a brief biographical sketch of each cabinet member.

Resources

1. Film The American Presidency
2. A Day in the Life of the President by James Bishop
3. The Glorious Burden by Stefan Lorant
4. American Heritage books on the presidency
5. Record "The Invention of the Presidency: An American Heritage Record"

Unit III - The American Eagle Tries Its Wings

Related Behavioral Objectives

1. Compare transportation systems from the canal era to modern systems by charting the advancements.
2. Be able to identify various occupations involved in modern highway construction.
3. Develop an awareness of the relationship between modern highway construction and safety standards by explaining several of these.
4. Develop an awareness of highway safety by citing examples (as observed in a recent auto trip).

Procedure

1. Procure film from library.
2. Give suggestions for creating posters.
3. Class discussion of trip reports.
4. Divide class into groups concerning either old road work, modern highway construction, or accidents.

Activities

1. Present movies on Chicago.
2. Posters comparing the construction of the first turnpikes to construction of modern roads.
3. Write a brief description of a recent auto trip listing as many safety features as possible.
4. Posters showing auto accidents.

Additional Activities

1. Distribute and discuss pamphlets on civil engineers and related highway careers on file in school guidance office. "America's Future Belongs to the Engineer."

Resources

1. Film A Trip from Chicago.
2. Filmstrip covering road building and early canals.
3. Film Careers in Construction (Ohio Contractors Association: 50 N. 3rd, Columbus, Ohio).
4. Slide presentation "Training in Construction" (Ohio Contractors Association).

Unit V - The Union Breaks Apart and Mends More Strong

Related Behavioral Objectives

1. Relate the role of acting and the theater to historical happenings by citing specific examples.

2. After studying about theater operations, the student will be able to identify three workers and their tasks.

3. List several training procedures involved in preparation for the acting profession.

4. By studying the music of the era, define how these affected or explained the historical happenings.

Procedure

1. Order movie from Ideal Picture Catalog listed under resources.

2. Organize a simulation game on President Lincoln's assassination.

3. Print out copies of Civil War Era songs for study.

Activities

1. Reports on what the theater was saying about the root causes of the Civil War.

2. Simulation Game: The Assassination of President Lincoln by J.W. Booth.

3. Study the music and lyrics of the historical era under study.

Resources

1. Records

    a. "The Sounds of History - The Union Sundered"

    b. "Burl Ives presents America's Musical Heritage."

    c. "Walt Whitman - Eyewitness to the Civil War."

    d. Film The Prince of Players, Ideal Picture Catalog ($32.50)

Unit VI - The Wide Open Spaces are Filled

Related Behavioral Objectives

1. Be able to list and explain five separate jobs in the factory.
2. Establish respect for each job in the assembly line by listing each and its function.
3. Compare the industrial layouts of factories during the Industrial Revolution to modern-day design by drawing several of these.
4. Develop an awareness of the birth of the American educational system by listing many of the causes for it.
5. Develop a respect for the changes in education from the one-room theory to modern concepts by citing many of the changes.
6. Be able to state the major qualifications for six teaching or related areas.
7. Create listings citing the need for education in our complex society.
8. Cite examples of the various roles assumed by educators in assisting students.

Procedure

1. Organize field trip to a local industry. Explain the assembly line.
2. Establish format for posters.
3. Develop the concept of the modern large complex school trying to solve all learning problems.
4. Organize dramatization as a tour of the school showing background and tasks of the employees. Have students portray various school vocations. Prepare a list of questions which each student must answer about the role he is assuming. The questions should relate to the individual educational careers (i.e., qualifications, duties, training).

Activities

1. Field trip to an industrial factory.
2. Posters showing factories during the Industrial Revolution. Posters showing modern individual plants.
3. Select some product which is produced by assembly line. Draw or produce the sequence of assembly and explain the significance of each job.
4. Dramatization - have students role-play the era of the one-room school house. Have a second group role-play the many different types of teaching and related vocations: guidance, work coordinator, speech specialist, school nurse, curriculum developer, coach, problem learner teacher, A.V. director, administration, visiting teacher, classroom teacher, teacher aides, paraprofessionals.
5. Explain and use handouts depicting the development and goals of career education as developed by the Orrville Career Education Comittee.
6. Simulation experience using the "Cootie Game" to establish the objectives of the assembly line (any related game could be used).
7. Contact individual about careers in rubber industry.

Resources

1. Name of industrial plant.
2. Career Education booklet.
3. Hand out sheet - Ohio's Career Development Continuum.
4. Film Industries for the Future.

Unit VII - Americans Build for a Complex Future

Related Behavioral Objectives

1. Given a list of city governmental officials, the student can identify five by name.
2. Given a list of duties of city officials, the student will be able to list three duties of each and explain their importance.
3. List and explain the general training and requirements of city officials.
4. Explain reasons for citizen involvement in the city governmental planning procedures.
5. List ways in which the average citizen is affected by city council decisions.

Procedure

1. Contact various city officials about class visitations.
2. Organize field trips to various city agencies.
3. Contact mayor about students visiting city council meeting.
4. Organize a mock city council meeting.

Activities

1. Bring various city officials into class.
2. Field trip to various city agencies (city hall, municipal plant, post office, telephone company, sewage).
3. Have students visit a city council meeting.
4. Hold a mock council meeting.
5. Create posters depicting cause and effect relationships between council decisions and the public realm.

Resources -

1. Film Democracy; Your Voice Can Be Heard. B2313 (Kent State Film $5.00, 20 min.)

Unit IX - America Participates in the Problems of the World

Related Behavioral Objectives

1. State causes and effects of unemployment and our economy.

2. List programs established by the government which have created careers for many individuals.

3. Understand the scope and requirements of civil service careers by listing many of them.

4. Indicate the role of the independent regulatory agencies in keeping our economy and society stable by explaining the functions of each one under study.

5. Develop an awareness and respect for military careers by listing and explaining many of these.

Procedure

1. Prepare a transparency covering the problems of unemployment.

2. Procure a copy of a civil service exam to give to the students. (Most bookstores have paperback sample copies.)

3. Contact civil service personnel about visiting class.

4. Set up visit by military recruiter.

5. Procure film dealing with the U.S. military.

Activities

1. Using charts or transparencies indicate the causes and effects of unemployment on the economy.

2. Give a sample civil service test to the class.

3. Get some civil service personnel to come to class (postal employees, welfare workers).

4. Have a military recruiter speak to the class; reproduce hand-outs for class.

5. Show a movie concerning military opportunities.

6. Make poster and have groups of students list jobs, especially unusual ones. On the poster choose group with the most jobs and the most unusual jobs to show scope of jobs.

Resources

1. Films. There are films concerning all branches of the military in the free film catalog.

Unit X - America Flourishes in a Shrinking World

Related Behavioral Objectives

1. Explain some of the effects of mass media on the American public.
2. Given the media of radio, TV and newspapers, have the students identify two careers in each media.
3. Be able to understand the inner workings of each media area with special consideration to those careers which often go unnoticed by explaining their functions.
4. Be able to draw an organizational sequence to either a radio, TV or newspaper production showing all the jobs involved.
5. Given a general outline, the students must prepare either a radio or TV show, or a front page newspaper.
6. Be able to identify four major problems facing today's American city and possible solutions.
7. Be able to identify two jobs which would involve elimination of urban problems.

Procedure

1. Develop the concept of urbanization and the problems growing out of this happening. Relate the role of government from the Industrial Revolution to present times in attempting projects of urban renewal (i.e., Progressive Era, New Deal, and Urban Renewal).
2. Create a survey quiz pertaining to the viewing of TV.
3. If live commercials are to be given, obtain the use of the video-tape machine to show these.
4. Make slides or transparencies of headlines for class discussion.
5. Obtain filmstrip from A.V. center at high school.

Activities

1. Study headlines from newspapers, radio and TV reports to study the use of propaganda.
2. Survey quiz dealing with the influence of TV.
3. Draw or design an advertisement layout, or create a line commercial.
4. Video tape a radio or TV program done by the students.
5. Have students prepare a front page headline.
6. Show filmstrip and film dealing with cities.

Resources

1. Filmstrip Problems of the Cities
2. Movies

   The Cities: A City Is to Live In
   The Tenement

Geography

Unit I - A View of the World

*The units in this program represent the units of the textbook which could be used.

Related Behavioral Objectives

1. Be able to list and explain the techniques used in map making.
2. Draw and explain the use of longitudinal and latitudinal lines.
3. List several skills needed in preparation for a career in map making.
4. List the variety of ways in which maps can be used in our daily lives and business.

Procedure

1. Discuss neighborhood maps.
2. Class discussion on longitudinal and latitudinal lines.
3. Obtain maps of Orrville from Chamber of Commerce.
4. Worksheet indicating the different types of maps available or in use.

Activities

1. Have students create maps indicating the general area of their neighborhood using scale and correct proportions.
2. Draw maps involving longitude and latitude. Write map coordinates using the above mentioned lines to depict various cities in the local neighborhood.
3. Design a color code for various land features and buildings. (p. 490 - Text: Man and His World)
4. Using maps of Orrville color in business and industrial plants and then determine future sites for business or industrial developments.
5. Have students draw or collect as many different types of maps as possible.

Resources

1. Textbook: Man and His World by James O'Hern, Silver Burdett Company, 1972.
2. Map Masters from A. V. center.
3. Maps of Orrville from Chamber of Commerce Office.

Unit II - The Earth - A Good Place to Live

Related Behavioral Objectives

1. List different data compiled by meteorologists in predicting weather.
2. List requirements and skills needed to be a meteorologist.
3. Be able to point out ways in which weather forecasting is related to the airline industry.
4. List ways in which such personnel as pilots, navigators, and air traffic controllers must work together for the safety of all.
5. Cite scientific and mathematical skills involved in air travel as performed by the above mentioned personnel.
6. List and explain ways in which farm extension work can and has helped to alleviate and eliminate certain problems affecting the farming population (i.e., the dust bowl region).
7. Cite four programs operated by the national or state agricultural departments which aid the farmer.

Procedure

1. Discuss the difference between climate and weather.
2. Make transparencies of newspaper weather maps and discuss in class.
3. Draw up plans for the weather charts.
4. Procure the films for the unit.
5. Contact a local pilot.
6. Contact a farm bureau representative.

Activities

1. Using weather maps from the newspaper have students study the various weather factors and then make predictions as to future weather happenings.
2. Create a weather chart depicting temperature, barometric pressure, cloud coverage and types, wind direction, precipitation, and have students selected to log this data twice daily.
3. Using another chart correlate the data between the various observations to see if any trends seem apparent.
4. More advanced students could use the data collected for the Orrville area and make their own weather prognostications.
5. Show the film The Air Traffic Controller, Don't Call Me, I'll Call You. (Kent State University)
6. Use a local pilot to talk to class about the various skills and communications involved in air travel and related careers.
7. Show the film Down on the Farm.
8. Contact a farm bureau worker who could explain programs designed to aid farmers.

Resources

1. Kent State University film AC2838 (9 min. - $5.00)
2. A. V. center - Jr. High
3. Farm Bureau

Unit III - Man - Jack-of-All-Trades

Related Behavioral Objectives

1. Given the factors of growing world population and reducing amounts of productive land, have students explain the importance of alternative food sources in the future.
2. List the various products which can be manufactured from a tree.
3. Given a list of wood products, list and explain several careers involved in each.
4. By taking a visit to a food processing plant the students should list at least three individual jobs and explain each one (i.e., one non-skilled, one technical, and one office career).

Procedure

1. Organize class into groups for food lists.
2. Discuss and sample, if possible, the meals of the future.
3. Contact horticulturist about speaking to class.
4. Discuss the wood processing field and set up tour or slide presentation.
5. Discuss the food processing industry and set up tour.

Activities

1. Divide the class into various continents. Have each one compile a list of the most common foods of that region.
2. Have the students design a meal using new sources of food. Bring in as many samples as can be procurred.
3. Guest speaker from greenhouse to explain the field of horticulture.
4. Have another group compile a listing of foods of the future.
5. Draw a large poster of a tree. Cut out various pictures of wood products and place these around the tree. Exlain each product and the career related to each.
6. Field trip to view wood processing.
7. Using such products as meats, vegetables, milk, cereal, and bread, have the class draw the processing procedure of each indicating the careers involved.
8. Visit food processing plant.

Resources

1. Local greenhouse plants.
2. Wood processing operation.

Unit IV - Society - Where the Action Is

Related Behavioral Objectives

1. To appreciate the advances in transportation by citing changes in cars, railroads, and planes from canal era to future prospects.

2. Given a view of a factory producing transportation equipment, the student will be able to list and explain three jobs observed (list both skilled and unskilled careers).

3. Identify the various ways in which transportation affects our daily lives.

4. By studying the delivery systems of the airlines and railroads, list several jobs involved in each (i.e., brakemen, baggage men, flagmen, conductors).

Procedures

1. Organize poster work or slide presentation on transportation changes.

2. Obtain films from A.V. center.

3. Set up tour at local factory (should involved transportation equipment).

4. Discuss services we receive from transportation.

5. Discuss the student papers on the transportation of goods.

Activities

1. Create posters or a slide presentation on transportation changes.

2. Show films From Kitty Hawk to Jumbo Jet and The Automobile in America. Also available is the film The Flight of Apollo 15.

3. Tour a local factory producing transportation equipment or view slides of this.

4. Draw posters indicating various products and services we receive by some means of transportation.

5. Write up the various steps and jobs involved in getting some product to Orrville from California by plane and by train.

Resources

1. A.V. center.

2. Local factories.

Unit V - Outlook for Tomorrow

Related Behavioral Objectives

1. Explain the cause and effect relationship between industrial plants and ecological problems. Also, cite one local example.
2. List three specific ways industry pollutes the environment.
3. Given these problems of industrial pollution, cite several jobs created by industries to solve these.

Procedures

1. Obtain films and/or filmstrips dealing with ecology.
2. Contact speaker from local industry.

Activities

1. View film Clean Town U.S.A.
2. View filmstrip Ecology: Can Man and Nature Co-exist?
3. Have speaker who is involved in environmental protection. (Have speaker stress the importance of maintaining industrial production pointing out the many careers it creates.)

Resources

1. A.V. center.
2. Local factory.

PARMA

Typing

This unit has integrated careers with the development of a skill. Integrating the careers should serve as a vehicle to make this skill more relevant for the student.

Description of the Personal Typing Student and Teaching Objectives

Personal typing is a one semester, 18-week study offered primarily to eighth graders, but each class does include a few ninth-grade students, and is composed of both boys and girls. Personal typing is an elective course and is chosen for many individual reasons.

It is the only elective business education course offered to the junior high school student in the Parma City School System.

The primary objectives of all personal typing students is learning to operate the typewriter competently; therefore, the first eight weeks of class time each semester will be devoted to learning basic typewriting manipulative skills.

The personal typing course of study objectives are designed to:

1. **Develop an adequate skill ability of net words a minute.**
2. **Acquaint the student with the proper basic manipulative skills.**
3. **Acquaint the student with the proper typed form of personal business letters, outlines, book reports, manuscripts, tabulated materials, rough draft, composition at the typewriter, and proofreader's marks.**

Comment: The student who accomplishes these objectives in class in one semester must apply himself in an above average, highly concentrated manner. With the exception of research study for the career manuscript no homework is assigned.

Career Orientation Objectives

Since personal typing is the only business education course offered at Pleasant Valley Junior High, the decision was made to inform the typing student about a wide variety of careers in many occupational areas.

To motivate and interest the boys, an approach that involved the whole business education career possibilities will hopefully be a more successful learning experience. The suggestion is frequently made to the class that even though they may not be personally and individually involved in working as a secretary, they will all at one time or another contact or cooperate with many employees, perhaps their own, working at that career. Even a cursory knowledge of that person's duties and qualifications will benefit their cooperative endeavors.

To achieve the dual objectives of skill development and career orientation in the time available necessitates using teaching methods and lesson planning that combine typing and career information.

Career orientation studies will be concentrated into the latter half of the semester on a daily lesson plan pattern developed by the following means: timed writings about careers, a career manuscript, career ready reference list, and word games, movies if time and facilities are available.

Career information developed in this manner will give the student reference sources about a wide variety of careers and a specific, definitive study of the career of his choice in the area of business education.

Individual student involvement (career manuscript) should create a higher degree of concentrated study and motivation in both skill and career development.

General Proposed Career Orientation Teaching Method

I. Initial and general presentation of the wide scope of careers in business education.
II. Specific presentations of 30 different careers by the means of timed writings.
III. Specific development of each career presented in the timed writings by means of a career ready reference list.
IV. Specific development by the students of the career of his choice in the form of a manuscript.
V. Review and enlarge by using student's manuscripts and reference lists.

Proposed Time Schedule Lesson Plan -- Semester Application

Third Week	- General introduction to careers in business education.
Fourth Week	- Explanation of career manuscript.
Fifth Week	- Introduction to and use of timed writings about careers. Continued use for the semester. Begin development of career ready reference from same source.
Fifteenth and Sixteenth Weeks -	Student types final copy of career choice manuscript and in doing so reviews and determines his knowledge about a specific career in business education.

Teaching Development of Initial Introduction to Career Orientation

The general introduction to careers in business education will be taught at the beginning of the third week of the semester.

Each student's typing station will be supplied with a copy of the pamphlet "Can I Be An Office Worker" by the Public Relations Department of General Motors. The pamphlet contains much general information, interesting historical data, and duties.

A general lecture will be given the class regarding the male student's need to acquire a background of information about employment in the field of business education. Exploration of opportunities benefits all.

Each student will be asked to read a section of the pamphlet aloud. Class discussion will follow each reading.

Each student will bring a copy of the want ad section of a newspaper to class the following day. Examination and study time will be allowed in class. Discussion period to follow wherein the employment opportunity type, scope and detail will be developed.

After the general introduction to careers, the specific career course of study requirements will be explained. The typing stations will be supplied with copies of the requirements.

Estimated class time will be two days of the third week of the semester, totaling two hours of career orientation presentation.

Teaching Development of Timed Writings About Careers

The textbook Personal Typewriting for Junior High Schools, second edition by Wanous and Haggblade, is used in the personal typing classes at Pleasant Valley Junior High School.

The introduction to timed writings and the first two weeks of student experience with timed writings will be taught from the subject textbook. One-minute timed writings will be taught the third week of the semester, and the subject textbook used for the third and fourth weeks of teaching timed writings.

A supplementary textbook, Timed Writings About Careers by Fries, will be used for all timed writings for the remaining 14 weeks of the semester. The career textbook contains 36 different courses in the area of business education. The information and knowledge acquired from the reading, typing, and compiling the ready reference list from this textbook will be the broad, basic career information developed by each student.

As the students' skill ability develops, a different career timed writing will be used each timing lesson until, by the end of the semester, all careers have been presented. Each different career timed writing will be introduced by the teacher reading the complete content of the timing with the class, followed by a brief discussion of the basic duties and requirements needed by a person employed in that career.

Timed writings about careers will serve the dual purpose of skill development and career orientation in one segment of the class time and so is judged to be the most efficient utilization of time. Using the dual purpose presentation method will be the most competent and advantageous method of informing the individual student within the framework of a group presentation method.

Two three-minute timings will be typed by the student three times a week, usually on Monday, Wednesday and Friday of each week. Net words per minute will be computed by each student. The best timing will be graded for skill development.

Estimated class time allotted for career timed writings is 15 minutes, three days a week to total 45 minutes per week. Fourteen weeks of 45 minutes per week will total 10-1/2 hours of career orientation presentation per semester.

Teaching Development of Career Ready Reference List

As the different career timed writings are typed in class, the student will compile a list of careers, their definitions and main duties.

The list will be handwritten and retained by the student until the 17th week of the semester when he will type the "Career Ready Reference List" in final tabulated form and submit for grading on skill ability.

Using the dual purpose presentation of career orientation and skill development (learning to type from handwritten and rough draft copy and perform the manipulative skill of tabulation) again is judged to be the most effective method of teaching and utilization of time.

Estimated class time will be approximately 15 minutes per week for 14 weeks to total 3-1/2 hours of career orientation in business education.

Teaching Development of Career Manuscript

Each student will be required to research and prepare in rough draft form a manuscript on "The Career of My Choice" in the area of business education.

Directions to accomplish the reference study required will be given in class at the beginning of the third week of the semester. Reference sources and a list of possible career choices for the manuscript content will be available at each student's station throughout the semester.

All class time during the 15th and 16th weeks of the semester will be used to type the manuscript.

Preparing the final draft of the career manuscript will serve the dual purpose of skill development and career orientation. Organization and review of that particular career informs the student and refines his information during the final draft typing.

The career manuscript typing will follow the unit of study on general manuscript typing.

If any of the manuscripts contain different and interesting information other than that covered in the Ready Reference List, class time will be used in the 18th week of the semester to read and discuss those careers in class.

Estimated class time allotted for the career manuscript will be two weeks which will total 10 hours of career orientation.

If any unusually different manuscripts are read in class, additional time (difficult to compute) will be used.

Career Orientation Manuscript Directions to Students

I. Research and accumulate information (take notes) on the career of your choice in the field of business education. A possible list appears below.

Include such information as:

Duties

Personal Qualifications

Working Conditions

Required education, skills and preparation

Related Careers

Salary

Beginning Jobs

Advanced Jobs

II. List of reference sources appears below.

III. Prepare a handwritten rough draft of the manuscript with at least three footnotes. Content length is to be four pages double-spaced. A title page and bibliography will be extra beyond the content page.

IV. Type a final copy of your career manuscript in class the 15th and 16th weeks of the semester. Typing the final copy will follow the unit of manuscript study. This will be approximately the first two weeks in January for the first semester students and the last two weeks in May for the second semester students.

V. You will be well prepared to type the final draft in class, but the research and rough draft copy must be done outside of class time or permitted in class after the daily assignment is finished.

BOOKKEEPING AND ACCOUNTING

Accounting Clerk
Accounts Payable Bookkeeper
Accounts Receivable Bookkeeper
Billing Clerk
Bookkeeper
Bookkeeping Machine Operator
Cashier
Cost Clerk
Data Processing Equipment Operator
General Clerk
Payroll Clerk
Posting Clerk

FIELDS OF OPPORTUNITIES

Auditing
Civil Service
Cost Accounting
Data Processing
Financial Accounting
Industrial Accounting
Public Accounting
Systems Analysis
Tax Accounting
Teaching
Utilities Accounting

TOP JOBS IN THE FIELD

Auditor
Certified Public Accountant
Chief Accountant
Comptroller
Credit Manager
Data Processing Programmer
Data Processing Supervisor
General Manager
Office Manager
Systems Analyst
Tax Accountant
Teacher
Treasurer

STENOGRAPHER AND SECRETARIAL

Assistant in Professional Office
Correspondence Clerk
Receptionist
Secretary
Stenographer
Transcribing Machine Operator
Typist

GENERAL AND CLERICAL

Data Typist
General Clerk
Key Punch Operator
Machine Operator
Messenger
Duplicating Machine Operator
Receptionist
Reproduction Typist
Telephone Operator
Teletype Operator
Timekeeper
Typist

FIELDS OF OPPORTUNITIES

Civil Service
Finance
Government Administration
Hospital Administration
Hotel, Motel Administration
Insurance
Legal
Manufacturing
Real Estate
Retailing
Teaching

TOP JOBS IN THE FIELD

Administrative Assistant
Credit Supervisor
Department Head in Office
Key Punch Supervisor
Office Manager
Order Supervisor
Payroll Supervisor
Shipping and Receiving Supervisor
Tabulating Supervisor
Teacher

MERCHANDISING AND SELLING

Audit Clerk
Cashier
Delivery Clerk
Inventory Clerk
Messenger
Outside Salesman
Price Clerk
Sales Clerk
Stock Clerk
Wrapper

Career Manuscript (continued)

FIELDS OF OPPORTUNITIES

Banking
Civil Service
Distribution
Insurance
Legal
Manufacturing
Medical
Dental
Teaching

TOP JOBS IN THE FIELD

Administrative Assistant
Court Reporter
Executive Secretary
Office Manager
Private Secretary
Public Stenographer
Teacher

FIELDS OF OPPORTUNITIES

Advertising
Market Research
Merchandising
Public Relations
Retailing
Sales Promotion
Store Control
Store Operation
Teaching
Wholesaling

TOP JOBS IN THE FIELD

Account Executive
Adversiting Manager
Manufacturers' Representative
Market Research Supervisor
Personnel Director
Public Relations Director
Purchasing Agent
Sales Manager
Teacher
Traffic Supervisor

Books

Opportunities in Office Occupations by Estelle L. Popham

Your Future as a Secretary by Neil Braky Noyes

The Road to Secretarial Success by Irene Place and Madeline S. Stroney

Horizons Unlimited (Paperback)

Careers in Medical Office Work

Your Future as a Temporary Office Worker by White

DOT Occupational Pamphlet File

Occupational Pamphlet File

Classroom Reference Source

"Can I Be an Office Worker," General Motors Public Relations Publication, Detroit, Michigan

"Now's Time to Hunt for a Summer Job," Cleveland Plain Dealer Article by Sylvia Porter

Occupational Briefs on the following careers:

- Secretary
- Stenographer
- Office Clerk
- Court Reporter
- Medical Secretary
- Dental Assistant
- Office Machine Operator
- Legal Secretary
- Receptionist

Bulletin Board Display material -- general discriptive material supplied by Southwestern Publishing Company

Copies of the local newspaper want ad sections.

Individual copies of Timed Writings About Careers by Fries.

CAREER ORIENTATION-PERSONAL TYPING-TIMED SUMMARY

Introduction to Careers	2 hours
Timed Writings About Careers	10 1/2 hours
Career Ready - Reference List	3 1/2 hours
Career Manuscript	10 hours
Word Games (used as time fillers)	?
Interesting Career Manuscripts (Difficult to Estimate)	?
Estimated Total Time	26 hours

Proposed Evaluation of Career Orientation Course of Study in Business Education

Teacher:

1. Determine if time allowance was ample or insufficient to implement the proposed course of study.
2. Examine and evaluate the student's career manuscript and ready reference list to determine its content.
3. Observe the student's reactions to the career material submitted in the daily lesson plans--his interest, application and organization.
4. Ask for the student's opinions and reactions to the sources studied.
5. Judge the financial investment as related to student achievement in career orientation.

Student:

Please answer the following questionnaire as briefly as possible.

1. Did you acquire a brief knowledge about a variety of careers?
2. Did you acquire detailed knowledge about one specific career?
3. Did the class time career activities accomplish the dual purpose of developing your typing skill and inform you about a variety of careers?
4. As a (girl) (boy) do you now realize the need for knowledge about careers in business education?
5. Do you know that there are many career opportunities in business education for men?
6. The career course of study was planned to involve the student on an individual basis with career exploration. Would you prefer individual or group presentation method in the area of careers in business education?
7. What other means of acquiring career information would you suggest?
8. Was the career information acquired worth the time used in class?

Reference List of Movies Available and Relative To Career Orientation in Business Education

IBM
Modern Talking Pictures Service
2238 Euclid Ave., Cleveland, Ohio 44115

- The Information Machine
- IBM: Close Up
- Impressions

CUYAHOGA COUNTY PUBLIC LIBRARY

- Personnel Management
- Office Etiquette
- Looking at Careers

EDUCATOR'S GUIDE TO FREE FILM

- The Right Touch
- Electric Typing Time

UNIVERSITY OF ILLINOIS CATALOGUE OF EDUCATIONAL FILM

- How to Keep a Job
- The Secretary: Taking Dictation
- University Secretary
- Office Etiquette
- Typewriter in Business

KENT STATE UNIVERSITY CATALOGUE OF EDUCATIONAL FILM

- Do I Want to be a Secretary?
- The Clerk
- The Department Manager's Work Problems
- Office Supervisor's Problems

Form Letter Used to Request Films

> Gentlemen:
>
> We would like to borrow a print of your film (insert name) as listed in the (date) edition of your (insert name of catalogue) for use on (date).
>
> If the film is not available on that date either (insert alternate date) will be satisfactory.
>
> We greatly appreciate the fact that you make your films available to schools (without charge if true).
>
> Sincerely,